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From: Commanding Officer, U. S. Naval Ammunition Depot, Crane, Indiana  
To: National Aeronautics and Space Administration, Goddard Space  
Flight Center, Electrochemical Power Sources Section (716.2),  
Space Power Technology Branch, Greenbelt, Maryland 20771

Subject: Monthly Progress Report on National Aeronautics and Space  
Administration Space Cell Test Program; submission of

Re: (1) Monthly Progress Report as of 28 February 1966 (3 copies)

1. The progress report for National Aeronautics and Space Administration  
disposal order W11,292B on the space cell test program is submitted as  
enclosure (1).

E. R. PETTERONE

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By direction

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FACILITY FORM 602	N66-23818	(THRU)
	176	(CODE)
	03	(CATEGORY)
	08-71789	(NASA CR OR TMX OR AD NUMBER)

*Log*

1165

1. Document affected-No.

and title

SEE REMARKS

2. Date issued

N66-23818

67-517 12 MAY 67

4. Authority for change: ☐ DDC ☐ AEC ☐ NASA ☐ Oral ☒ Written 5. Issued by:

6. Other:

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N66-23818 (NASA CR-71789)

N66-24113 (NASA CR-71506)

N66-24405 (NASA CR-74628)

N66-24404 (NASA CR-74631)

N66-24664 (NASA CR-71694)

N66-25375 (NASA CR-66099)

N66-25566 (NASA CR-66099)

Classification for Federal Scientific and Technical Information

U.S. DEPARTMENT OF COMMERCE  
NATIONAL BUREAU OF STANDARDS

OFFICE OF RESEARCH 1966 67

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# N O T I C E

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# MONTHLY PROGRESS REPORT THROUGH 28 February 1966

## LIFE CYCLE TESTS

1. Status of Cycling Program: The cycling program has included cells from the following manufacturers: General Electric Company (G.E.), Gould-National Batteries, Inc. (Gould), Sonotone Corporation (Sonotone), Yardney Electric Corporation (Yardney), Gulton Industries, Inc. (Gulton) and Delco-Remy (Delco).

TOTAL NUMBER OF PACKS IN PROGRAM: 163

	Total Number of Packs Cycled			Cells Failed*	
	To Date	Cycling	Failed	Since Last Report	Total To Date
<b>NICKEL CADMIUM (10-cell packs)</b>					
G.E. 3.0 a.h.	12	5	7	0	50
Gould 3.5 a.h.	12	4	8	0	60
Sonotone 5.0 a.h.	12	6	6	4	46
Gulton 6.0 a.h.	12	2	10	0	66
<b>TOTAL</b>	<b>48</b>	<b>17</b>	<b>31</b>	<b>4</b>	<b>222</b>
<b>NICKEL CADMIUM (5-cell packs)</b>					
Sonotone 3.0 a.h.	6	6	0	0	1
Sonotone 5.0 a.h. STABISTOR	8	6	2	4	12
G.E. 5.0 a.h. NIMBUS	6	6	0	0	0
G.E. 12 a.h.	13	6	7	1	23
G.E. 12 a.h. 3rd Elect.	4	2	2	0	2
Gulton 3.6 a.h. COULOMETER	1	1	0	0	0
Gulton 4.0 a.h.	6	6	0	1	3
Gulton 5.0 a.h. NIMBUS	6	6	0	1	2
Gulton 5.6 a.h.	6	6	0	0	0
Gulton 6.0 a.h.	1	0	1	0	3
Gulton 6.0 HSI	3	3	0	0	3
Gulton 6.0 a.h. 3rd Elect.	6	6	0	0	3
Gulton 12 a.h.	6	4	2	0	9
Gulton 20 a.h.	12	3	9	0	32
Gulton 50 a.h.	2	0	2	0	6
Gould 20 a.h.	12	4	8	0	26
<b>TOTAL</b>	<b>98</b>	<b>65</b>	<b>33</b>	<b>7</b>	<b>125</b>
<b>SILVER CADMIUM (10-cell packs)</b>					
Yardney 12 a.h.	5	3	2	0	16
<b>TOTAL</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>16</b>
<b>SILVER CADMIUM (5-cell packs)</b>					
Yardney 5.0 a.h.	6	3	3	1	6
<b>TOTAL</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>6</b>

\* All failure analysis results are cumulative. Total pack failures are shown on pages 8 through 39; partial pack failures on pages 40 through 53.

FACILITY FORM 882	(ACCESSION NUMBER)	(THRU)
	126	1
	(PAGES)	(CODE)
	CR-77789	03
	(NASA CR OR TMX OR AD NUMBER)	(CATEGORY)

Enclosure (1)

	Total Number of Packs			Cells Failed*	
	Cycled	Cycling	Failed	Since Last Report	Total To Date
	To Date				
SILVER ZINC (10-cell packs)					
Yardney 12 a.h.	1	0	1	0	6
Delco 25 a.h.	1	1	0	0	0
TOTAL	2	1	1	0	6
SILVER ZINC (5-cell packs)					
Delco 25 a.h.	3	0	3	0	10
Delco 40 a.h.	1	0	1	0	2
TOTAL	4	0	4	0	12

\* All failure analysis results are cumulative. Total pack failures are shown on pages 8 through 39; partial pack failures on pages 40 through 53.

## 2. Test Parameters:

### a. General Cycling Program:

#### (1) Ambient Temperature:

- (a) 0° C.
- (b) 25° C.
- (c) 40° C.

#### (2) Voltage limits per pack on charge:

- (a)  $1.55 \pm 0.03$  volts per cell at 0° C.
- (b)  $1.49 \pm 0.03$  volts per cell at 25° C.
- (c)  $1.45 \pm 0.03$  volts per cell at 40° C.

#### (3) Depth of Discharge:

##### (a) 90-minute and 3-hour orbits:

- 1. 15 percent and 25 percent at 0° C.
- 2. 25 percent and 40 percent at 25° C.
- 3. 15 percent and 25 percent at 40° C.

##### (b) 24-hour orbits:

- 1. 50 percent at 25° C and 40° C.

(4) Orbit Times:

(a) 90 minutes--30-minute discharge and 60-minute charge.

(b) 3 hours--30-minute discharge and 150-minute charge.

(c) 24 hours--1-hour discharge and 23-hour charge..

b. Nimbus Packs:

(1) Ambient Temperature:

(a) 0° C.

(b) 25° C.

(c) 40° C.

(2) Voltage limit per pack on charge:  $1.49 \pm 0.03$  volts per cell at each temperature.

(3) Depth of Discharge:

(a) 15 percent and 25 percent at 0° C.

(b) 25 percent and 40 percent at 25° C.

(c) 15 percent and 25 percent at 40° C.

(4) Orbit Time: 90-minutes--30-minute discharge and 60-minute charge.

c. Silver-Cadmium Packs:

(1) Ambient Temperatures:

(a) 90-minute orbit:

(1) -20° C.

(2) 0° C.

(3) 25° C.

(b) 24-hour orbit:

(1) 0° C.

(2) 25° C.

(3) 40° C.

(2) Voltage limits per pack on charge:

(a) 90-minute orbit:

(1)  $1.60 \pm 0.03$  volts per cell at  $-20^{\circ}$  C.

(2)  $1.58 \pm 0.03$  volts per cell at  $0^{\circ}$  C.

(3)  $1.55 \pm 0.03$  volts per cell at  $25^{\circ}$  C.

(b) 24-hour orbits:  $1.50 \pm 0.03$  volts per cell at  $0^{\circ}$  C.,  
 $25^{\circ}$  C., and  $40^{\circ}$  C.

(3) Depth of Discharge:

(a) 90-minute orbit: 25 percent at all temperatures.

(b) 24-hour orbit:

(1) 20 percent and 50 percent at  $0^{\circ}$  C.

(2) 20 percent at  $25^{\circ}$  C.

(3) 20 percent and 50 percent at  $40^{\circ}$  C.

(4) Orbit Time:

(a) 90-minute--30-minute discharge and 60-minute charge.

(b) 24-hours--1-hour discharge and 23-hour charge.

d. Silver-Zinc Packs:

(1) Ambient Temperature:  $25^{\circ}$  C.

(2) Voltage limit per pack on charge:  $1.97 \pm 0.03$  volts per cell  
at  $25^{\circ}$  C.

(3) Depth of Discharge:

(a) 3-hour orbit: 40 percent at  $25^{\circ}$  C.

(b) 24-hour orbit: 25 percent and 40 percent at  $25^{\circ}$  C.

(4) Orbit Times:

(a) 3 hours--30-minute discharge and 150-minute charge.

(b) 24 hours--1-hour discharge and 23-hour charge.

e. Third Electrode Packs (Gulton):

(1) Ambient Temperatures:

- (a) 0° C.
- (b) 25° C.
- (c) 40° C.

(2) Voltage limits per pack on charge: None. Limit is controlled by the third electrode voltage:

- (a) 150 millivolts at 0° C.
- (b) 300 millivolts at 25° C.
- (c) 300 millivolts at 40° C.

(3) Depth of Discharge:

- (a) 25 percent and 40 percent at 0° C.
- (b) 25 percent and 40 percent at 25° C.
- (c) 15 percent and 25 percent at 40° C.

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.

f. Third Electrode Packs (General Electric):

(1) Ambient Temperatures:

- (a) 0° C.
- (b) 25° C.
- (c) 40° C.

(2) Voltage limit per pack on charge: None. Limit is controlled by the third electrode voltage; 400 millivolts at all temperatures.

(3) Depth of Discharge:

- (a) 25 percent and 40 percent at 0° C.
- (b) 25 percent and 40 percent at 25° C.
- (c) 15 percent and 25 percent at 40° C.

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.



g. Stabistor Packs:

(1) Ambient Temperatures:

(a) -20° C.

(b) 0° C.

(c) 25° C.

(d) 40° C.

(2) Voltage limits per pack on charge: None. Stabistor controls cell voltage.

(3) Depth of discharge:

(a) 25 percent and 40 percent at -20° C.

(b) 25 percent and 40 percent at 0° C.

(c) 25 percent and 40 percent at 25° C.

(d) 15 percent and 25 percent at 40° C.

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.

h. Coulometer Packs:

(1) Ambient Temperature: 25° C.

(2) Voltage limit per pack on charge: None. Coulometer controls cell voltage.

(3) Depth of Discharge:

(a) 30 percent for 5 cells (Sonotone 5 a.h.)--coulometer built by Goddard Space Flight Center.

(b) 40 percent for 10 cells (Gulton 5.6 a.h.)--coulometer built by General Electric.

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.

i. Sherfey Cycling Packs:\*

(1) Ambient Temperature: 25° C.

(2) Voltage limit per pack on charge: None. Pack cycled in the partially discharged state.

(3) Depth of Discharge: 40 percent at 25° C.

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.

\* This type of cycling starts with the cells in a completely discharged condition. Each cycle consists of a charge of 60 percent of the cell's rated capacity followed by a discharge of 40 percent of the cell's rated capacity. Upon completion of each fifth cycle, the cells are discharged through a resistor for 90 minutes to return the cells to the completely discharged condition for the start of the next sequence of five cycles. In this manner, the cells operate below the 100 percent charged state much of the time thereby preventing overcharging and buildup of excessive gas pressure.

### 3. Data:

a. Under normal operation, complete data is scheduled to be recorded every 32 cycles on the 90-minute and 3-hour packs. On the 24-hour packs, complete data is taken every eight cycles.

b. The attached data sheets give end of discharge and end of charge voltage readings for each cell on each cycle recorded.

### 4. Capacity Tests:

a. Before cycling, each pack was given a capacity test at its respective cycling temperature. This check consisted of a c/10 charge for 16 hours followed by a c/2 discharge to 1.0 volt per cell average. After each 88 days of cycling, each pack was discharged immediately after the end of the regular cycle charge period, at the c/2 rate to 1.0 volt per cell average. The pack was then recharged at the c/10 rate for 16 hours and discharged at the c/2 rate to 1.0 volt per cell average. The pack was then recharged at the c/10 rate for 48 hours, voltage limited to the cycle limits. Data of capacity tests is tabulated on pages 53 through 61.

CELL TYPE: General Electric 3.0 Ampere-Hour

FAILURE ANALYSIS      Nickel-Cadmium

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PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
15	25%	1.5	25°	432	7	8065	Low Volt Disch, Low Volt Chg, Blistering on Bottom Edge of Pos Plate, Migration of Neg Plate Material, Separator Completely Deteriorated.
			25°	414	8	8254	Low Volt Disch, Low Volt Chg, Blistering on Bottom Edge of Pos Plate, Migration of Neg Plate Material, Separator Completely Deteriorated.
			25°	479	5	8714	Low Volt Disch, Normal Volt Chg, Deposit on Terminal, Migration of Active Material, Blistering on Edge of Pos Plate, Separator Deteriorated.
			25°	267	10	10123	Low Volt Disch, Normal Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated.
			25°	485	4	10382	Low Volt Disch, Low Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates; Separator Deteriorated.
			25°	447	9	10382	Low Volt Disch, Low Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated.
16	40%	1.5	25°	427	7	3985	Low Volt Disch, Normal Volt Chg, Pos Tab Broken and Touching Case, Burned Tape on Tab Caused by Overheating From Poor Tab Weld.
			25°	58	6	4473	Low Volt Disch, Normal Volt Chg, Short on One Edge of Plates, Neg Plate Material Penetrated Separator.
			25°	361	1	4741	Low Volt Disch, Normal Volt Chg, Shorted, Separator Deteriorated, Neg Plate Material Penetrated Separator.
			25°	522	5	4917	Low Volt Disch, Low Volt Chg, Separator Impregnated with Neg Plate Material, Separator Deteriorated.

CELL TYPE: General Electric 3.0 Ampere-Hour

FAILURE ANALYSIS      Nickel-Cadmium

60

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
16	40%	1.5	25°	456	10	4917	Low Volt Disch, Low Volt Chg, Separator Impregnated with Neg Plate Material, Separator Deteriorated.
			25°	719	4	5013	Low Volt Disch, Low Volt Chg, Separator Impregnated with Neg Plate Material, Separator Deteriorated, Several Small Burned Areas on Separator.
39	15%	1.5	50°	541	2	779	Low Volt Disch, High Volt Chg, Leaked, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
			40°	540	6	2083	Low Volt Disch, High Volt Chg, Leaked, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
			40°	549	7	2523	Low Volt Disch, High Volt Chg, Pos Tab Burned.
			40°	527	1	7213	Low Volt Disch, Normal Volt Chg, Deposit Around Pos Terminal, Pos Tab Burned, Migration of Neg Plate Material, Separator Deteriorated.
			40°	534	5	8109	Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.5 gm, Pos Tab Burned, Migration of Active Material, Separator Deteriorated.
			40°	550	8	8109	Low Volt Disch, Normal Volt Chg, Pinpoint Penetration, Separator Deteriorated.
40	25%	1.5	40°	464	3	2073	Low Volt Disch, High Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
			40°	3131	8	2182	Low Volt Disch, Normal Volt Chg, Leaked, Loose Plate Material on Separator.
			40°	47	7	2182	Low Volt Disch, High Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned and Broken.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>General Electric 3.0 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
40	25%	1.5	40°	49	5	2446	Low Volt Disch, High Volt Chg, Pos Weld to Terminal Stud Burned, Poor Weld.
			40°	45	10	2461	Low Volt Disch, High Volt Chg, Loose Plate Material on Separator, Short at Outside End of Pos Plate.
			40°	466	2	2509	Low Volt Disch, High Volt Chg, Leaked, Pos Tab Burned and Shorted to Neg Tab.
43	15%	3.0	40°	441	6	2509	Low Volt Disch, High Volt Chg, Leaked, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
			40°	416	4	1182	Low Volt Disch, Low Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
			40°	499	3	1515	Low Volt Disch, High Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned and Broken.
			40°	412	6	1911	Showed Open Circuit at Start of Cycle, Pos Tab Broken, Burned Tape on Tab Caused by Overheating From Poor Tab Weld.
			40°	426	9	2298	Showed Open at Start of Cycle, Pos Tab Corroded, Pos Tab Broken, Top of Separator Burned, Separator Impregnated with Neg Plate Material, Separator Deteriorated.
			40°	436	7	2515	Showed Open at Start of Cycle, Pos Tab Corroded, Pos Tab Broken, Poor Roll, Uneven Wind at End of Roll, Shorts at Top of Roll, Separator Deteriorated.
			40°	435	10	2656	Showed Open at Start of Cycle, Pos Tab Corroded, Pos Tab Broken, Separator Impregnated with Neg Plate Material, Separator Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>General Electric 3.0 Ampere-Hour</u> FAILURE ANALYSIS <u>Nickel-Cadmium</u>
	25%	3.0	40°	222	6	1672	Showed Open Circuit at Start of Cycle, Pos Tab Broken, Burned Tape on Tab Caused By Overheating From Poor Tab Weld.
			40°	366	8	3848	Low Volt Disch, High Volt Chg, Pinpoint Penetration, Separator Deteriorated, Blistering on Bottom Edge of Pos Plate.
			40°	459	1	3854	Shorted on Cycling, Deposit on Pos Terminal, Pinpoint Penetration, Separator Deteriorated.
			40°	77	3	3854	Low Volt Disch, Normal Volt Chg, Migration of Active Material, Separator Deteriorated.
			40°	3120	2	4487	Low Volt Disch, High Volt Chg, Deposit on Pos Terminal, Loose Active Pos Plate Material, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetrations, Blistering on Pos Plates, Separator Deteriorated.
			40°	296	10	4487	Low Volt Disch, Low Volt Chg, Deposit on Pos Terminal, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetrations, Blistering on Pos Plates, Separator Deterioration.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gould 3.5 Ampere-Hour</u> FAILURE ANALYSIS <u>Nickel-Cadmium</u>
3	25%	1.5	25°	73	5	2785	Low Volt Disch, High Volt Chg, Short Near Center of Core, Piece of Pos Plate Material Between Plates Causing Short Through Separator.
			25°	54	2	3090	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.7 gm, Weak Weld on Neg Tab to Plate.
			25°	165	9	4081	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.7 gm, Deposit on Glass Seal, Short Through Separator, Short at Pos Tab Near Center of Core, Neg Tab Weld to Plate Weak.
			25°	93	6	4289	Low Volt Disch, Normal Volt Chg, Leaked Around Glass Seal, Lost 2.6 gm, Separator Deteriorated, Neg Plate Material Penetrated Separator.
			25°	97	7	4401	Low Volt Disch, Normal Volt Chg, Leaked Around Glass Seal, Lost 2.5 gm, Separator Deteriorated, Neg Plate Material Penetrated Separator.
			25°	77	4	4751	Low Volt Disch, Normal Volt Chg, Separator Deteriorated, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates
			25°	188	10	4751	Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.1 gm, Neg Plate Material on Separator.
4	40%	1.5	25°	81	7	1609	Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.2 gm, High Pres Bulge Top.
			25°	90	8	1827	Low Volt Disch, Low Volt Chg, Leaked, Lost 2.7 gm, High Pres Bulge Top.
			25°	2	1	2110	Low Volt Disch, Low Volt Chg, Separator Deteriorated at Center of Core, Under Pressure When Opened.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gould 3.5 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
4	40%	1.5	25°	43	6	2954	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.3 gm, Plate Material on Separator.
			25°	27	3	3029	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Separator Deteriorated.
			25°	198	10	3164	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.6 gm, Separator Deteriorated, Pos Plate Material Between Plates.
	25%	3.0	25°	49	2	3007	Low Volt Disch, Normal Volt Chg, Leaked Around Glass Seal, Lost 2.7 gm, Neg Plate Material Migrated Through Separator, Separator Deteriorated, One Weak Weld Pos Tab to Plate.
			25°	37	1	3130	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.1 gm, Glass Seal Broken, Separator Very Dry, Neg Plate Material Migration, Pinpoint Penetration, Loose Neg Plate Material on Separator, Separator Deteriorated, All Tab Welds to Plate Weak.
			25°	109	6	3483	Low Volt Disch, Low Volt Chg, Leaked, Lost 2.0 gm, Deposit on Glass Seal, Separator Deteriorated, Pinpoint Penetration, Neg Plate Material on Separator, Weak Weld on One Tab to Pos Plate Weld.
			25°	104	5	3736	Shorted on Cycling, Deposit on Glass Seal, Leaked, Lost 1.1 gm, Weak Weld Pos Tab to Plate, Neg Plate Material on Separator, Pinpoint Penetration, Separator Deteriorated.
			25°	131	7	3884	Low Volt Disch, Normal Volt Chg, Deposit Around Glass Seal, Leaked, Lost 1.7 gm, Neg Plate Material Loose, Pinpoint Penetration, Separator Deteriorated.
			25°	62	3	4173	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Leaked, Lost 1.4 gm, One Weak Weld on Pos Tab to Plate, Pinpoint Penetration, Separator Deteriorated.



PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gould 3.5 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
8	40%	3.0	25°	68	6	1346	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.5 gm, Plate Material on Separator.
			25°	112	8	1704	Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.0 gm, Pos Tab Weld to Bottom of Can Weak, Pos Tab Weld to Plate Weak.
			25°	39	1	1985	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Separator Deteriorated, Neg Plate Material on Separator.
			25°	170	10	1985	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.8 gm, Pos and Neg Tab Weld Weak to Plates Near Center of Core, Separator Deteriorated at Center of Core.
			25°	78	7	2138	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 1.4 gm, Pos Tab Weld to Case Weak, Separator Deteriorated, Neg Plate Material Penetrated Separator.
			25°	41	2	2494	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 1.7 gm, Separator Deteriorated, Neg Plate Material Impregnated Separator, One Bad Weld Neg Tab to Plate.
			25°	130	9	2494	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 2.1 gm, Separator Deteriorated, Pos and Neg Plate Material Impregnated Separator.
27	15%	1.5	40°	13	3	2901	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.5 gm, Separator Deteriorated, Pos Plate Material on Separator.
			40°	195	8	2901	Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.6 gm, Short Through Separator, Separator Burned at Center of Core, Pos Plate Material on Separator.
			40°	103	7	2998	Low Volt Disch, Normal Volt Chg, High Pres, Short Through Separator, Pieces of Pos Plate Material Between Plates.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gould 3.5 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
27	15%	1.5	40°	200	10	3270	Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.5 gm, Short Through Separator, Separator Deteriorated at Center of Core, Pos Tab Weld to Case Weak.
			40°	197	9	4102	Low Volt Disch, High Volt Chg, Leaked Around Glass Seal, Lost 1.4 gm, Short at Pos Tab, Separator Deteriorated, Neg Plate Material Penetrated Separator.
			40°	11	2	4485	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Separator Deteriorated, Separator Impregnated with Neg Plate Material.
28	25%	1.5	50°	122	2	408	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.8 gm, Weak Bottom Weld Suspicious Spot but not Definite.
			40°	157	7	484	Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.0 gm, High Pres Bulge.
			40°	158	8	484	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.9 gm, High Pres Bulge Top.
			40°	141	5	860	Low Volt Disch, High Volt Chg, Leaked, Lost 3.5 gm.
			40°	168	10	1293	Low Volt Disch, High Volt Chg, Weak Weld to Bottom of Case.
			40°	121	1	1811	Low Volt Disch, Low Volt Chg, Short at Outside End of Plates, Grid Wire Penetrated Separator.
			40°	133	3	1811	Low Volt Disch, High Volt Chg, Weak Weld on Pos Tab to Case.
			40°	140	4	1811	Low Volt Disch, Low Volt Chg, Short Around Pos Tab, Blistering on Pos Plate, Active Neg Plate Material on Separator.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gould 3.5 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
28	25%	1.5	40°	155	6	1811	Low Volt Disch, Low Volt Chg, Short Through Separator, Weak Weld to Bottom of Case.
			40°	163	9	1811	Low Volt Disch, Low Volt Chg, Short Through Separator, Weak Weld to Bottom of Case, Deposit on Glass Seal.
31	15%	3.0	40°	R166	9	1500	Low Volt Disch, Low Volt Chg, Leaked, Lost 7.1 gm, Separator Deteriorated.
			40°	R179	10	1500	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.5 gm, Short Through Separator, Separator Deteriorated, One Weak Tab.
			40°	R92	2	1696	Low Volt Disch, High Volt Chg, Pieces of Plate Material Shorted Through Separator, Separator Deteriorated.
			40°	126	3	2411	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 2.1 gm, Short Through Separator by Piece of Pos Plate Material Between Plates, Separator Deteriorated, Neg Plate Material Impregnated Separator, Tab to Plate Weld Poor.
			40°	R162	8	2477	Low Volt Disch, High Volt Chg, Leaked Around Glass Seal, Lost 2.4 gm, Separator Deteriorated, Neg Plate Material Impregnated Separator, Pinpoint Penetration, Poor Weld Pos Tab to Case.
			40°	72	1	2517	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 1.8 gm, Short Between Plates, Extra Piece of Pos Plate Between Plates, Separator Deteriorated, Pos Tabs to Plate Weld Both Weak.
			40°	143	6	2517	Low Volt Disch, Low Volt Chg, Short Through Separator at Start of Core, Extra Piece of Pos Plate Material, Separator Impregnated with Neg Plate Material, Separator Deteriorated, Neg Tab Weld to Pigtail Weak, One Tab to Pos Plate Weld Weak, Still Under Pressure When Opened.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gould 3.5 Ampere-Hour</u> FAILURE ANALYSIS <u>Nickel-Cadmium</u>
32	25%	3.0	40°	125	6	138	Low Volt Disch, Normal Volt Chg, Bottom Weld Weak, Greenish Corrosion Inside at Neg Lead.
			40°	65	3	495	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.5 gm, Bad Glass Seal Around Neg Terminal.
			40°	1	1	800	Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.2 gm, Shorts Near Center of Core.
			40°	67	4	875	Low Volt Disch, Low Volt Chg, Leaked, Lost 2.2 gm, Short Around Tabs, Pos Tab Weld Weak to Case.
			40°	132	7	875	Failed During Shut Down to Move to Another Chamber, Leaked, Lost 4.4 gm, High Pres. Neg Tabs Pushed Out of Cell, Short at Center and Outside Edge of Core.
			40°	149	9	974	Low Volt Disch, High Volt Chg, Leaked, Lost 1.1 gm, Piece of Pos Plate Material Shorted Through Separator, Weak Welds to Case and Plates.

CELL TYPE: Sonotone 5.0 Ampere-Hour

FAILURE ANALYSIS      Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
2	40%	1.5	25°	811	10	3155	Shorted on Cycling, Leaked Around Seal, High Pressure Bulge on Bottom, Insulators Brittle, Exposed Grid Wires at Center of Core Penetrated Separator Causing Large Burned Area at Short, Pos and Neg Tab Weld Poor.
			25°	3628	5	3992	Low Volt Disch, Normal Volt Chg, Leaked Around Seal, High Pres Bulge on Bottom, Hole in Separator Exposing Pos and Neg Plates, Neg Plate Material Penetrated Separator.
			25°	3613	2	4411	Low Volt Disch, Low Volt Chg, Two Pieces of Neg Plate Material Wore Hole in Separator at Scoring Mark, Burned Through Plates, Neg Tab Welds Poor, Separator Beginning to Deteriorate.
			25°	3630	6	5262	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Pos and Neg Plate Material on Separator, Separator Deteriorated, Neg Tab to Plate Welds Weak, Burn Marks on Separator at Tabs, High Pressure Bulge.
			25°	3631	7	5262	Low Volt Disch, Low Volt Chg, Uncoined Plate Edges Pierced Separator Causing Partial Shorts, Burn Marks Around Tab Areas, Weak Weld on All Tab to Plate Welds, Deep Pressure Points Caused by Scoring, Separator Torn at Start of Core Exposing Pos and Neg Plate, Separator Deteriorated, Neg Plate Material on Separator.
			25°	3611	1	6671	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, High Pressure Bulge, Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Sonotone 5.0 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
25	15%	1.5	40°	4852	5	6348	Low Volt Disch, High Volt Chg, Separator Deteriorated, Large Burned Area at Center of Core, Pinpoint Penetration, Deep Scoring Caused Hole in Separator, Partial Shorts Around Edge of Plates, Deep Pressure Points Caused by Scoring.
			40°	4364	4	7052	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, High Pressure Bulge, Short Caused by Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.
			40°	4317	1	7758	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.
			40°	4350	3	9070	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Hole in Separator Adjacent to Corner of Outside Neg Plates, Grid Wire Penetrated Separator and Shorted to Pos Plate, Separator Completely Deteriorated.
			40°	6850	6	9220	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Hole Through Separator Near Edge of Plate Causing Short, Small Piece of Neg Plate Material Between Plates and Separator.
			40°	4347	2	9328	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Neg Plate Material Migrated Through Separator, Separator Deteriorated, Weak Weld Tab to Neg Plate.
26	25%	1.5	40°	4323	1	2487	Grid Wire Penetrated Separator at Tabs.
			40°	6773	9	2902	Shorted on Cycling, Slight Burn Adjacent to Neg Tab, Separator Deteriorated, Neg Plate Material Penetrated Separator, Tab Welds Weak.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Sonotone 5.0 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
26	25%	1.5	40°	7224	6	2993	Low Volt Disch, Normal Volt Chg, High Pres Bulge, Deposit Around Seal, Neg Tab Weld Weak, Neg Plate Material Penetrated Separator.
			40°	7232	7	2993	Low Volt Disch, Normal Volt Chg, High Pres Bulge, Deposit Around Seal, Pos Tab Weld Weak, Plate Broken at Pos Tab, Deep Pressure Points From Scoring, Separator Completely Deteriorated.
			40°	4881	3	3344	Shorted on Cycling, Complete Short From Deep Scoring, Plate Shorted Through Outer Wrap.
			40°	4240	4	3625	Low Volt Disch, Low Volt Chg, Separator Deteriorated, Plate Material Penetrated Separator.
30	25%	3.0	40°	3657	7	855	Hole in Separator Allowing Pos Plate to Hit Case, Separator Damaged at Center of Cell Allowing Pos and Neg Plate to Short Together.
			40°	3643	4	3068	Low Volt Disch, Low Volt Chg, Separator Completely Deteriorated, Neg Tab to Plate Welds Weak, Burn Spots Around Tabs, Deep Scoring Caused Burn Spots on Separator.
			40°	809	9	3068	Low Volt Disch, Low Volt Chg, Deposit Around Glass Seal, Burn Spots Around Edge of Separator Caused By Uncoined Edge of Plates, Deep Scoring Caused Burn Spots on Separator, Burn Spots Around Tab Areas, Separator Deteriorated.
			40°	3658	8	3684	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Leaked, Lost 1.3 gm, Short Caused by Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.
			40°	3617	1	4141	Shorted During Cycling, Deposit on Glass Seal, Hole in Separator at Tab Weld Area Caused Short, Separator Completely Deteriorated.
			40°	7230	10	4141	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Migration of Neg Plate Material, Separator Completely Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 6.0 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
13	25%	1.5	25°	2305	1	308	Low Volt Disch, High Volt Chg, Lost 12 gm, CO <sub>3</sub> Top Ceramic, High Pres Bulge.
			25°	2355	10	502	Low Volt Disch, High Volt Chg, Lost 10 gm, High Pres Bulge.
			25°	3134	5	2969	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates.
			25°	3211	7	3084	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates.
			25°	2613	4	3598	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plate, Separator Deteriorated.
			25°	2324	2	4021	Low Volt Disch, Low Volt Chg, Ceramic Short, Separator Deteriorated, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge.
14	40%	1.5	25°	1623	4	262	Low Volt Disch, High Volt Chg, Lost 12 gm, High Pres Bulge.
			25°	1635	5	262	Voltage Fell Off During Charge, Went Flat in 3 Min. on Disch, Lost 6 gm, Concave Wall, High Pres Bulge, Ceramic Broken Inside Case, CO <sub>3</sub> on Outside of Ceramic, Pos Terminal Loose.
			25°	2356	1	450	Low Volt Disch, High Volt Chg, Lost 12 gm, High Pres.
			25°	2387	2	1113	Low Volt Disch, High Volt Chg, Ceramic Short.
			25°	2391	3	1618	Low Volt Disch, Low Volt Chg, Ceramic Short.
			25°	3208	7	2086	Low Volt Disch, Normal Volt Chg, Ceramic Short.



PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 6.0 Ampere-Hour</u>
							FAILURE ANALYSIS <u>Nickel-Cadmium</u>
17	25%	3.0	25°	1862	5	721	Low Volt Disch, High Volt Chg, Ceramic Short.
			25°	1823	3	721	Low Volt Disch, High Volt Chg, High Pres Bulge, Burnt Spot on Neg Plate Near Bottom Second From End, Ceramic Short.
			25°	2348	10	1688	Low Volt Disch, Low Volt Chg, Ceramic Short.
			25°	1757	1	2375	Low Volt Disch, Low Volt Chg, Ceramic Short, Deposit Around Ceramic Seal, High Pres Bulge.
			25°	1598	2	2449	Low Volt Disch, Low Volt Chg, Pinpoint Penetration of Separator, Blistering on Pos Plate, High Pres Bulge.
			25°	2347	9	2885	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates, High Pressure Bulge, Still Under Pressure When Opened.
18	40%	3.0	25°	1826	6	365	Low Volt Disch, Chg Volt Normal, Lost 3 gm, Concave Wall, Ceramic Short.
			25°	1615	3	608	Low Volt Disch, Normal Volt Chg, Deposit on Top of Pos Terminal, Lost 5.1 gm, High Pres Bulge.
			25°	1827	7	643	Low Volt Disch, High Volt Chg, High Pres Bulge, Ceramic Short.
			25°	2228	9	643	Low Volt Disch, High Volt Chg, Ceramic Short.
			25°	1562	5	1145	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates.
			25°	1233	1	1550	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plate, Neg Plate Material on Separator.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 6.0 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
37	15%	1.5	50°	1764	3	238	Low Volt Disch, Volt Did Not Increase on Following Chg, (1.00 V) Lost 4 gm, Ceramic Short.
			40°	1784	8	1566	Low Volt Disch, Low Volt Chg, Lost 10.5 gm, Ceramic Short.
			40°	1802	4	2819	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plate.
			40°	2333	10	2981	Low Volt Disch, Normal Volt Chg, Ceramic Short, Blistering on Pos Plates.
			40°	1769	7	4897	Low Volt Disch, Normal Volt Chg, Ceramic Short, Leaked, Lost 1 gm, Blistering on Pos Plate, Separator Deteriorated.
			40°	1814	6	6064	Low Volt Disch, High Volt Chg, Deposit on Pos Terminal, Separator Deteriorated, Neg Plate Material on Separator, Blistering on Pos Plates, Ceramic Short.
38	25%	1.5	50°	1454	8	37	No Volt on Chg or Disch, Ceramic Short.
			50°	1815	6	114	Volt Fell Off During Disch, Chg Volt Slightly Low, Lost 3.5 gm, Ceramic Short.
			40°	1853	9	187	Rev on Disch, Chg Volt Normal, Lost 4 gm, Deposits Around Pos Terminal (Outside), Ceramic Short.
			40°	1627	3	225	Low Volt Disch, High Volt Chg on Cycle 219, Dead on 225, Lost 3.5 gm.
			40°	2405	5	1333	Low Volt Disch, Normal Volt Chg, Pos Bus Shorted to Case.
			40°	1626	2	1377	Low Volt Disch, Low Volt Chg, High Pres Bulge, Ceramic Short.

CELL TYPE: Gulton 6.0 Ampere-HourFAILURE ANALYSIS      Nickel-Cadmium

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PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
41	15%	3.0	40°	1771	9	649	Low Volt Disch, High Volt Chg, Ceramic Short.
			40°	1801	6	1062	Low Volt Disch, Normal Volt Chg, Ceramic Short.
			40°	3135	2	1132	Low Volt Disch, Normal Volt Chg, Ceramic Short.
			40°	1852	7	1157	Low Volt Disch, Normal Volt Chg, Ceramic Short, Blistering on Pos Plates.
			40°	2221	8	1157	Low Volt Disch, Normal Volt Chg, Ceramic Short.
			40°	1632	3	1689	Low Volt Disch, Normal Volt Chg, Ceramic Short, Blistering on Pos Plates.
42	25%	3.0	50°	2309	8	96	Low Volt Disch, Normal Volt Chg, Ceramic Short.
			40°	2346	7	382	Low Volt Disch, Low Volt Chg, CO <sub>3</sub> on Bottom of Case, Ceramic Short.
			40°	2306	9	416	Low Volt Disch, High Volt Chg, Ceramic Short.
			40°	918	1	484	Low Volt Disch, Low Volt Chg, High Pres Bulge, Deposit on Bottom of Case, Ceramic Short, Lost 3.1 gm.
			40°	2340	6	3619	Low Volt Disch, Normal Volt Chg, Deposit Around Ceramic Seal and Bottom Seam of Can, Leaked, Lost 8.2 gm, Pinpoint Penetration, Separator Deteriorated.
			40°	2334	4	4133	Low Volt Disch, Low Volt Chg, Deposit Around Cracked Pos Terminal, Leaked, Lost 8.8 gm, Migration of Neg Plate Material, Blistering on Pos Plates, Separator Completely Deteriorated, Ceramic Short.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 6.0 Ampere-Hour</u>
							FAILURE ANALYSIS <u>Nickel-Cadmium</u>
61	15%	1.5	0°	1622	2	1	Volt Between 0.25 and 0.3 V Throughout Cycle, Side Concave, Burnt Case, End Neg Pushed Into Pos Tab. Cell Replaced in Pack Due to Early Failure.
			0°	1845	8	6	Lost 5 gm, Leak at Weld on Bottom, High Pres Bulge, Cell Replaced in Pack Due to Early Failure.
			0°	2397	5	2762	Low Volt Disch, Low Volt Chg, Ceramic Short.
			0°	1825	4	4094	Low Volt Disch, Low Volt Chg, Ceramic Short, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge.
			0°	2311	10	4285	Low Volt Disch, Low Volt Chg, Ceramic Short, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge.
			0°	2400	6	4413	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates, High Pres Bulge.
			0°	1636	3	*9760	Low Volt Disch, Low Volt Chg, High Pres Bulge, Concave Sides, Leaked, Lost 2.7 gm, Rough Place on Pos Plate Shorted Through Separator, Migration of Neg Plate Material Through Separator, Blistering on Pos Plates, Separator Deteriorated, Ceramic Short.
			0°	1616	1	*10146	Low Volt Disch, High Volt Chg, Deposit on Pos Terminal, Concave Sides Causing Bus to Short Against Case, Pos Tab Burned, Migration of Neg Plate Material Through Separator, Separator Very Slightly Deteriorated, Leaked, Lost 6.0 gm.

\* FAILED DURING THIS REPORTING PERIOD.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 6.0 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
66	25%	3.0	0°	1794	6	1045	Low Volt Disch, High Volt Chg, High Pres Bulge, Concave Side, Ceramic Broken, No Seal, Lost 5.1 gm, Pos Bus Against Case.
			0°	1843	8	1173	Low Volt Disch, Low Volt Chg, Wall Concave, Ceramic Short.
			0°	1781	5	1237	Low Volt Disch, High Volt Chg, High Pres Bulge, Deposit Around Pos Terminal, Ceramic Broken on Pos Terminal, Blisters on Pos Plate, Burnt Spot on Separator at Blisters, Lost 1.3 gm.
			0°	1634	3	1417	Low Volt Disch, Normal Volt Chg, Ceramic Short, High Pres Bulge, One Side Concave Other Convex, Pos Plates Blistered, Lost 2.3 gm.
			0°	1823	7	2122	Low Volt Disch, Low Volt Chg, Leaked, Lost 7.8 gm, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge, One Side Concave.
79	50%	24.0		1591	4	4414	Low Volt Disch, Normal Volt Chg, Deposit on Pos Terminal, High Pressure Bulge, Concave Sides Shorting Against Pos Bus, Cerami Short, Migration of Neg Plate Material, Pinpoint Penetration o Separator.
			25°	2982	1	149	Low Volt Disch, Normal Volt Chg, Deposit on Pos Terminal, Still Under Pressure When Opened, Ceramic Short, Very Light Migration, Blistering on Pos Plates, Separator Deteriorated.
			25°	2984	3	164	Low Volt Disch, Low Volt Chg, Still Under Pressure When Opened, Ceramic Short, Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated.
			25°	2983	2	545	Low Volt Disch, Normal Volt Chg, Burned Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated.
			25°	2985	4	545	Low Volt Disch, Normal Volt Chg, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deterioration.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>General Electric 12.0 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
85	15%	1.5	40°	428	4	8888	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Still Under Pressure When Opened, Migration of Neg Plate Material, Separator Completely Deteriorated.
			40°	448	3	8947	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Still Under Pressure When Opened, Migration of Neg Plate Material, Separator Completely Deteriorated.
			40°	455	2	9710	Low Volt Disch, Normal Volt Chg, Still Under Pressure When Opened, Migration of Neg Plate Material, Separator Completely Deteriorated.
93	50%	24.0	40°	208	2	266	Low Volt Disch, Normal Volt Chg, Was Opened Up But Did Not Show Anything to be Wrong with Cell, Failure Due to Loss of Capacity.
			40°	204	1	349	Low Volt Disch, Normal Volt Chg, Deposit on Pos Terminal, Pin-point Penetration, Separator Deteriorated.
			40°	209	3	349	Low Volt Disch, Normal Volt Chg, Deposit on Pos and Neg Terminal, Migration of Neg Plate Material, Separator Deteriorated.
			40°	210	4	349	Low Volt Disch, Normal Volt Chg, Deposit on Neg Terminal, Pin-point Penetration, Separator Deteriorated.
			40°	211	5	349	Low Volt Disch, Normal Volt Chg, Deposit on Neg Terminal, Migration of Neg Plate Material, Separator Deteriorated, Plate Not Packed Evenly.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>General Electric 12.0 Ampere-Hour</u>
							FAILURE ANALYSIS <u>Nickel-Cadmium</u>
96	40%	1.5	25°	445	3	3822	Low Volt Disch, Low Volt Chg, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator.
			25°	446	2	4020	Low Volt Disch, Low Volt Chg, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator.
			25°	442	4	4020	Low Volt Disch, Low Volt Chg, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator.
97	40%	3.0	25°	438	2	3894	Low Volt Disch, Low Volt Chg, Deposit on Pos and Neg Terminals, Pinpoint Penetration, Separator Deteriorated.
			25°	435	3	3946	Low Volt Disch, Normal Volt Chg, Still Under Pressure When Opened, Migration of Neg Plate Material, Blistering on Pos Plate, Separator Deteriorated.
			25°	434	4	5002	Low Volt Disch, Normal Volt Chg, Still Under Pressure When Opened, Migration of Neg Plate Material, Separator Completely Deteriorated.
99	25%	1.5	40°	429	3	3841	Shorted on Cycling, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator, Leaked at Neg Terminal, Epoxy Lifted Up.
			40°	432	2	3841	Failed During Shut Down of Pack, Separator Deteriorated, Separator Impregnated with Neg Plate Material.
			40°	440	1	4853	Low Volt Disch, Low Volt Chg, Separator Deteriorated, Separator Impregnated with Neg Plate Material.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>General Electric 12.0 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
100	25%	3.0	40°	427	3	4170	Shorted on Cycling, High Pressure Bulge, Still Under Pressure When Opened, Blistering on Pos Plates, Separator Completely Deteriorated.
			40°	431	2	4358	Shorted on Cycling, High Pressure Bulge, Still Under Pressure, Migration of Neg Plate Material, Separator Completely Deteriorated.
			40°	436	1	4424	Shorted on Cycling, Migration of Neg Plate Material Through Separator, Separator Completely Deteriorated.



PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 12 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
290	25%	1.5	40°	1460	4	3060	Low Volt Disch, Low Volt Chg, Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated Allowing Plates to Short Together.
			40°	1459	3	3318	Shorted on Cycling, Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated Allowing Plates to Short Together.
			40°	1461	5	5124	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated.
296	40%	1.5	25°	1447	4	5036	Low Volt Disch, Normal Volt Chg, Piece of Loose Neg Plate Material Between Plates, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated.
			25°	1443	2	5152	Shorted on Cycling, High Pressure Bulge, Blistering on Pos Plates, Separator Completely Gone, Hottest Point Near Center of Pack, All Insulators Burned, Leaked, Lost 3.3 gm.
			25°	1445	3	5152	Low Volt Disch, Low Volt Chg, Deposit on Both Terminals, High Pressure Bulge, Migration of Neg Plate Material, Short Through Separator Near Center of Plate, Separator Completely Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 20 Ampere-Hour</u>  FAILURE ANALYSIS <u>Nickel-Cadmium</u>
73	25%	1.5	25°	396	3	1776	Low Volt Disch, Normal Volt Chg, Concave Side, Neg Ceramic Seal Broken, Lost 23.7 gm.
			25°	387	1	6120	Low Volt Disch, Low Volt Chg, Lost 13.2 gm, Separator Completely Deteriorated, Neg Plate Material Migration, Pinpoint Penetration, Blistering on Pos Plates, High Pressure Bulge.
			25°	465	4	7763	Low Volt Disch, Low Volt Chg, Deposit on Pos Terminal, Sides Concave, Migration of Active Plate Material, Blistering on Pos Plates, Separator Completely Deteriorated, Ceramic Short.
74	25%	3.0	25°	458	4	1184	Low Volt Disch, Low Volt Chg, Leaked, Lost 14.2 gm, Blistering on Pos Plates.
			25°	419	3	1302	Low Volt Disch, Normal Volt Chg, Leaked, Lost 21.9 gm.
			25°	440	2	1754	Low Volt Disch, Normal Volt Chg, Leaked Around Both Terminals, Ceramic Broken on Neg Terminal, Lost 18.0 gm, Neg Plate Material Penetrated Separator, Sides Concaved, Shorting Case to Bus.
76	15%	1.5	40°	453	2	7697	Shorted on Cycling, Deposit on Neg Terminal, Ceramic Broken Around Neg Terminal, Extraneous Active Material Caused Short Between Plates, Separator Completely Deteriorated.
			40°	431	4	7698	Cell Shorted During Shut Down for Cell Removal, High Pressure Bulge, Still Under Pressure When Opened, Pinpoint Penetration, Causing Shorts, Separator Completely Deteriorated.
			40°	455	3	9348	Shorted During Cycling, High Pressure Bulge, Still Under Pressure When Opened, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated, Short on Upper Corner Near Neg Tab.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 20 Ampere-Hour</u>
							FAILURE ANALYSIS <u>Nickel-Cadmium</u>
87	40%	1.5	25°	468	1	163	Low Volt Disch, High Volt Chg, High Pres Bulge, Lost 8 gm.
			25°	388	2	208	Low Volt Disch, High Volt Chg, Lost 26.7 gm, Ceramic Short Around Pos Terminal.
			25°	394	3	627	Low Volt Disch, High Volt Chg, Lost 16.4 gm, High Pres Bulge, Deposit on Both Terminals, Ceramic Short Neg to Case.
			25°	454	4	627	Low Volt Disch, Low Volt Chg, Lost 21.6 gm, Deposit on Both Terminals, Sides Concave, Hit Bus on Both Sides.
			25°	386	5	627	Low Volt Disch, Low Volt Chg, Lost 18.1 gm, High Pres Bulge, Burnt Separator 5th or 6th Neg Plate Near Top, Ceramic Short.
88	40%	3.0	25°	422	2	151	Low Volt Disch, High Volt Chg, High Pres Bulge, Bottom Ceramic Leak, Lost 25 gm.
			25°	404	1	151	Low Volt Disch, High Volt Chg, High Pres Bulge, Bottom Ceramic Leak, Lost 25 gm.
			25°	466	3	358	Low Volt Disch, High Volt Chg, High Pres Bulge, Lost 16.4 gm.
			25°	429	5	358	Low Volt Disch, Low Volt Chg, Ceramic Short Around Pos Terminal.
90	25%	1.5	40°	452	4	2824	Low Volt Disch, Low Volt Chg, Short Through Separator at Top of Plates, High Pres Bulge on Sides, High Pres, Separator Deteriorated.
			40°	457	5	2824	Low Volt Disch, Normal Volt Chg, Short Through Separator, Blistering on Pos Plate, High Pres Bulge on Sides, High Pres.
			40°	378	3	4045	Normal Volt Disch, Went Dead on Chg During Cap Check, Ceramic Short, Separator Completely Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 20 Ampere-Hour</u> FAILURE ANALYSIS <u>Nickel-Cadmium</u>
91	25%	3.0	40°	395	4	2862	Shorted Out Following Capacity Check, Leaked, Lost 6.8 gm, Deposit on Both Terminals, Both Ceramic Seals Broken, Separator Completely Deteriorated, Neg Plate Material Migration, Separator Very Wet, Plastic Wrap Burned, Ceramic Short.
			40°	412	3	3385	Shorted on Cycling, High Pressure Bulge, Pos and Neg Plate Material on Separator, Separator Completely Deteriorated.
			40°	489	1	4480	Shorted During Cycling, Deposit on Both Terminals, Still Under Pressure When Opened, Concave Sides, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated.
			40°	447	2	4480	Shorted During Cycling, Deposit on Neg Terminal, High Pressure Bulge, Concave Sides, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated.
101	15%	1.5	0°	435	2	3111	Low Volt Disch, High Volt Chg, Leaked, Lost 24.6 gm, High Pres Bulge, Separator Very Dry.
			0°	407	5	3111	Low Volt Disch, High Volt Chg, Leaked, Lost 20.4 gm, Separator Very Dry.
			0°	438	4	3629	Low Volt Disch, High Volt Chg, Leaked, Lost 13.2 gm, High Pres Bulge, Sides Concave, Blistering on Pos Plates.
115	25%	1.5	0°	490	3	2107	Low Volt Disch, Normal Volt Chg, Walls Concave, Busses Shorted to Case, Lost 26.9 gm.
			0°	508	2	2203	High Pres Bulge, Blisters on Pos Plate, Busses Shorted to Case.
			0°	467	4	2291	Black Deposit on Outside on Neg Terminal, High Pres Bulge, Busses Shorted to Case, Blisters on Pos Plate, Burnt Spot on Separator.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gould 20 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
104	25%	1.5	25°	69	1	2672	Low Volt Disch, Low Volt Chg, Shorted at Bottom on Pos Plate, Pos Grid Wire Penetrated Separator, Short at Top Between Pos Grid and Neg Tab, High Pressure.
			25°	R36	5	2826	Low Volt Disch, Low Volt Chg, Short Between Plates, Grid Wire Penetrated Separator, Pos Plate Material Between Plates, High Pressure.
			25°	5	3	2980	Low Volt Disch, Low Volt Chg, Separator Completely Deteriorated, Short Between Plates, High Pressure.
112	15%	1.5	40°	17	1	5005	Low Volt Disch, Low Volt Chg, Short Between Plates, Short About One Inch From Bottom of Plates, Separator Completely Deteriorated, High Pressure.
			40°	25	2	5005	Low Volt Disch, Low Volt Chg, Shorted Through Separator, Shorted on Bottom Corner of Plates, Separator Completely Deteriorated, High Pressure.
			40°	38	5	5213	Low Volt Disch, Low Volt Chg, Short at Top Corner of Plate Where Pos Tabs are Connected to Plates, Separator Deteriorated Allowing Plates to Come Together, Blistering on Pos Plates.
118	40%	1.5	25°	61	2	1747	Low Volt Disch, Low Volt Chg, Short at Bottom of Pos Plate, Grid Wires Penetrated Separator Where Tape Holds Plates Together, High Pressure.
			25°	R91	4	1963	Low Volt Disch, Low Volt Chg, Shorted at Bottom Corner of Pos Plates, Grid Wires Through Separator, Rough Grid Showing Through at Top and Bottom of Most Plates, High Pressure.
			25°	92	5	2937	Low Volt Disch, Low Volt Chg, Short Through Separator on Side of Plates, Pos Plate Material Penetrated Separator, High Pressure.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gould 20 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
119	40%	3.0	25°	73	5	222	Normal Volt Disch, Low Volt Chg, Short Near Bottom of 5th or 6th Pos, No Obvious Cause.
			25°	80	2	1793	Low Volt Disch, Normal Volt Chg, Neg Plate Material Penetrated Separator, High Pressure, Blistering on Pos Plate.
			25°	86	3	1793	Low Volt Disch, Normal Volt Chg, Neg Plate Material Penetrated Separator, High Pressure, Blistering on Pos Plate.
122	25%	3.0	40°	16	2	801	Low Volt Disch, Low Volt Chg, Blistering on Pos Plates, Separator Deteriorated, Plate Material on Both Sides of Separator, High Pressure.
			40°	58	3	801	Low Volt Disch, Low Volt Chg, Blistering on Pos Plates, Separator Deteriorated, Plate Material on Both Sides of Separator, High Pressure.
			40°	18	5	983	Low Volt Disch, Low Volt Chg, Plate Material Penetrated Separator, Pos Plates Blistered, High Pressure.
126	25%	1.5	40°	9	3	1273	Low Volt Disch, Low Volt Chg, Shorted at Bottom Corner of Neg Plate, Grid Wire Penetrated Separator, Several Other Plates Had Grid Wires Sticking Out, High Pressure.
			40°	R29	4	1509	Low Volt Disch, Low Volt Chg, Shorted at Bottom Corner of Pos Plate, Grid Wire Penetrated Separator, Blistering on Pos Plates, Separator Deteriorated, High Pressure.
			40°	11	5	1569	Low Volt Disch, Low Volt Chg, Shorted on Side of Pos Plate, Grid Wire Penetrated Separator, High Pressure.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 50 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
95	25%	1.5	0°	109	3	2643	Shorted Out While Cycling, All Plates Shorted at Bottom Center, Separator Very Dry and Stiff From Heat, Blistering on Pos Plate.
			0°	107	5	2938	Shorted Out While Cycling, Short Between Plates at Center Near Bottom of Plates, Separator Dry, Small Amount of Neg Plate Material Migration on Separator.
			0°	115	1	3227	Low Volt Disch, High Volt Chg, Separator Impregnated with Neg Plate Material, Large Blisters on Pos Plate, One Neg Plate Stuck to Can.
123	15%	1.5	40°	119	2	1873	Low Volt Disch, Low Volt Chg, Separator Decomposed, Hot Spots Through Separator Shorted Out Several Plates, High Pres Bulge, Still Under Pressure When Opened.
			40°	118	3	1873	Went Dead During Shutdown, Separator Decomposed, Several Small Hot Spots on Each Plate, Outside Neg Plates Stuck to Case, High Pres Bulge, Deposit Around Ceramic Seal of Pos Terminal.
			40°	117	4	1873	Went Dead During Shutdown, Separator Decomposed, Neg Plate Stuck to Case, High Pres Bulge, Still Under Pressure When Opened.

Pack Number	Depth of Discharge	Orbit Period (Hours)	Test Temperature	Cell Number	Position in Pack	Cycles Completed	Cell Type: <u>Delco 25 Ampere-Hour</u> Failure Analysis Silver-Zinc
75	40%	24.0	25°			32	Cell Blew Up, Pack Returned to Manufacturer.
89	40%	24.0	25°			80	Returned to Manufacturer for Analysis.
288	40%	3.0	25°			120	Returned to Manufacturer for Analysis.



PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Delco 40 Ampere-Hour</u> FAILURE ANALYSIS Silver-Zinc
275	25%	24.0	25°			139	Returned to Manufacturer for Analysis.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Yardney 12 Ampere-Hour</u>
							FAILURE ANALYSIS Silver-Cadmium
33	50%	24.0	40°		3	58	Leaked, Dried Out.
			40°		2	126	Leaked, Dried Out.
			40°		1	152	Leaked, Dried Out.
			40°		8	197	Leaked, Dried Out.
			40°		4	210	Leaked, Dried Out.
			40°		10	210	Leaked, Dried Out.
57	50%	24.0	0°		1	162	Leaked, Electrolyte Shorted Out Cell.
			0°		2	162	Leaked, Electrolyte Shorted Out Cell.
			0°		10	162	Leaked, Electrolyte Shorted Out Cell.
			0°		3	166	Leaked, Electrolyte Shorted Out Cell.
			0°		4	166	Leaked, Electrolyte Shorted Out Cell.
			0°		5	166	Leaked, Electrolyte Shorted Out Cell.
			0°		6	166	Leaked, Electrolyte Shorted Out Cell.
			0°		7	166	Leaked, Electrolyte Shorted Out Cell.
			0°		8	166	Leaked, Electrolyte Shorted Out Cell.
			0°		9	166	Leaked, Electrolyte Shorted Out Cell.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>General Electric 3.0 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
20	40%	3.0	25°	421	5	3704	Low Volt Disch, Low Volt Chg, Blistering on Bottom and Top Edge of Pos Plate, Migration of Neg Plate Material, Separator Completely Deteriorated.
			25°	433	2	4485	Low Volt Disch, Low Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated, Burned Pos Tab.
			25°	711	6	4485	Low Volt Disch, Low Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetrations, Blistering on Pos Plates, Separator Deteriorated, Deposit on Pos Terminal.
			25°	710	3	4889	Shorted on Cycling, Deposit on Pos Terminal, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetrations, Blistering on Pos Plates, Separator Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gould 3.5 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
52	25%	1.5	0°	116	8	7858	Low Volt Disch, Low Volt Chg, Still Under Pressure When Opened, Neg Plate Material on Separator, Excess Migration of Neg Plate Material, Separator Deteriorated.
			0°	194	10	8367	Low Volt Disch, Normal Volt Chg, Under High Pressure When Opened, Pinpoint Penetration, Migration of Active Material Around Tab Areas.
			0°	108	7	9724	Low Volt Disch, High Volt Chg, Loose Active Pos Plate Material, Migration of Neg Plate Material Through Separator, Separator Deteriorated.
			0°	118	9	9724	Low Volt Disch, Low Volt Chg, Loose Active Pos Plate Material, Migration of Neg Plate Material Through Separator, Separator Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Sonotone 5.0 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
1	25%	1.5	25°	4361	4	2995	Low Volt Disch, High Volt Chg, Inclusion on Surface of Outside Pos Plate Wore Hole Through Separator and Thin Outside Wrap, Separator Sticking to Neg. Plate, Glass Seal Leaked.
			25°	4335	1	4423	Low Volt Disch, High Volt Chg, Neg Tabs Weak Weld to Plates, Separator Melted at Center of Core, Extreme Pressure Points on Separator From Scoring Causing High Resistance Shorts.
			25°	4878	6	7782	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Short Caused by Excess Scoring, Migration of Neg Plate Material, Separator Completely Deteriorated.
5	25%	3.0	25°	4351	2	3771	Low Volt Disch, High Volt Chg, Deposit on Glass Seal, Excess Scoring, Migration of Neg Plate Material, Deep Pressure Points Resulting in Intermittant Shorts, Separator Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Sonotone 5.0 Ampere-Hour</u> FAILURE ANALYSIS <u>Nickel-Cadmium</u>
6	40%	3.0	25°	4324	8	1069	Low Volt Disch, Normal Volt Chg, Separator Impregnated With Active Material, Separator Sticking to Neg Plate.
			25°	6904	10	1136	Low Volt Disch, Low Volt Chg, Small Hole in Separator at Start of Coil, Pos Plate Edge Broken Allowing Grid Wire to Penetrate Separator.
			25°	3637	4	1161	Grid Wires of Pos Plate Penetrated Separator and Shorted to Neg Plate, Active Plate Material Penetrated Separator at Three Points, Bad Tab Welds.
			25°	6875	9	3798	Low Volt Disch, Normal Volt Chg, High Pressure Bulge, Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.
			25°	6882	7	4608	Low Volt Disch, Normal Volt Chg, Excess Scoring, Shorts at Edge of Plates, Neg Tab Area, and at Scoring, Weak Weld Neg Plate to Tab, Separator Deteriorated.
29	15%	3.0	40°	3626	1	1418	Shorted on Cycling, Neg Tab Welds Poor, Active Plate Material Penetrated Separator at Scoring Marks.
			40°	810	7	4835	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Burn Spots Along Top Edge of Neg Plate, Hole Burned in Separator, Weak Weld Neg Tab to Plate.
			40°	4327	8	4340	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Hole in Separator Adjacent to Score Band, Separator Completely Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Sonotone 5.0 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
49	15%	1.5	0°	6887	9	2010	Low Volt Disch, Low Volt Chg, Burn on Separator Opposite Pos Tab.
			0°	4370	3	10073	Shorted During Cycling, Short Through Separator Caused By Deep Pressure Points Adjacent to Scoring, Migration of Neg Plate Material, Small Inclusion on Plates Starting to Penetrate Through Separator.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 5.0 Ampere-Hour (NIMBUS)</u> FAILURE ANALYSIS <u>Nickel-Cadmium</u>
128	25	1.5	40	291	3	2422	Shorted During Cycling, Neg Plate Not Welded To Case, Loose Neg Plate Material at Center of Core, Migration of Neg Plate Material, Separator Deteriorated, Ceramic Short.



PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 6.0 Ampere-Hour</u>
							FAILURE ANALYSIS      Nickel-Cadmium
62	25%	1.5	0°	1630	10	2995	Low Volt Disch, High Volt Chg, Leaked, Lost 6.8 gm, Ceramic Seal Broke, Deposit on Inside of Ceramic, High Pres Bulge, Blistering on Pos Plates.
			0°	1792	4	4066	Low Volt Disch, Low Volt Chg, Small Shorts Through Separator Near Pos Tab, Blistering on Pos Plate, Separator Deteriorated.
			0°	1806	5	4441	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates, High Pres Bulge.
			0°	2227	7	8590	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Still Under Pressure When Opened, Pinpoint Penetration, Blistering on Pos Plates, Ceramic Short.
65	15%	3.0	0°	1284	4	5012	Low Volt Disch, Low Volt Chg, Deposit on Pos Terminal, Still Under Pressure When Opened, Concave Sides, Edge of Pos Tab Shorted to Top of Neg Plates, Very Light Migration of Neg Plate Material, Blistering on Pos Plates.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 6.0 Ampere-Hour (HSI)</u> FAILURE ANALYSIS <u>Nickel-Cadmium</u>
238	25%	1.5	40°	5321	5	4350	Low Volt Disch, Low Volt Chg, Still Under Pressure When Opened, Pos Tab Burned, Migration of Neg Plate Material, Blistering on Pos Plate, Separator Completely Deteriorated, Neg Plate Shorted Through Separator.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>General Electric 12.0 Ampere-Hour</u>  FAILURE ANALYSIS      Nickel-Cadmium
82	25%	1.5	25°	430	2	7527	Low Volt Disch, Normal Volt Chg, Pierced Separator Caused By Rough Place at Top Edge of Neg Plate, Neg Plate Material Migrated, Separator Deteriorated.
124	25%	1.5	0°	410	5	3037	Cell Lost Capacity on Cycling But Came Back When Removed From Pack, So It was Put Back on Cycling in Same Pack.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 20 Ampere-Hour</u> FAILURE ANALYSIS <u>Nickel-Cadmium</u>
102	15%	3.0	0°	449	2	135	Volt Fell Suddenly at End of Chg, Burn Spots at Busses, Concave Around Spots, End Neg Pushed Into Pos Tab.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gould 20 Ampere-Hour</u> FAILURE ANALYSIS <u>Nickel-Cadmium</u>
98	25%	1.5	0°	77	5	3556	Low Volt Disch, Low Volt Chg, Separator Deteriorated, Neg Plate Material Penetrated Separator, Two Pos Plates Not Welded to Tabs.
			0°	47	1	8619	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Pieces of Loose Neg Plate Material Between Plates, Migration of Neg Plate Material, Separator Deteriorated, Short Through Separator at Bottom of Plates Where Tape Holds Plates Together.
105	25%	3.0	25°	40	1	4306	Low Volt Disch, Low Volt Chg, Still Under Pressure When Opened, Hot Spots Around Pinpoint Penetration, Deep Penetration by Blisters on Pos Plate, Separator Deteriorated.
108	15%	3.0	40°	81	2	4003	Shorted on Cycling, Still Under Pressure When Opened, Several Shorts Caused by Small Pieces of Metal Between Plates, Blistering on Pos Plates, Separator Deteriorated.
			40°	82	3	4233	Shorted During Cycling, Still Under Pressure When Opened, Loose Pieces of Pos Plate Material Between Plates, Pinpoint Penetration, Blistering on Pos and Neg Plates, Separator Deteriorated, Short Between Pos Plate and Neg Tab at Top of Cell.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Sonotone 3.0 Ampere-Hour</u>  FAILURE ANALYSIS      Nickel-Cadmium
202	40%	1.5	25°	A3553	3	1630	Low Volt Disch, Normal Volt Chg, Cell Very Dry, Capacity Decay Due to Insufficient Electrolyte, Migration of Plate Material Around Tab and Scoring Areas.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 6.0 Ampere-Hour (Third Electrode)</u>
							FAILURE ANALYSIS     Nickel-Cadmium
11	25%	1.5	25°	147	3	2753	Third Electrode Shorted to Pos, Ceramic Short, Blistering on Pos Plates, Separator Deteriorated, Leaked, Lost 1.3 gm.
59	25%	1.5	0°	140	3	3202	Third Electrode Shorted to Neg Plate, Migration of Neg Plate Material, Shorted out Third Electrode, High Pressure Bulge, Still Under Pressure When Opened, Lost 1.4 gm.
71	40%	1.5	0°	130	5	2993	Low Volt Disch, High Volt Chg, Deposit on Neg Terminal, Leaked, Lost 8.7 gm, High Pressure Bulge, Large Deposits of Loose Active Neg Plate Material, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 3.6 Ampere-Hour</u> FAILURE ANALYSIS <u>Nickel-Cadmium</u>
Sherfey	40%	1.5	25	106	2	2409	Low Volt Disch, Low Volt Chg, Deposit on Edge of Top to Side Weld, Leaked, Lost 3.9 gm., Loose Active Material Pos and Neg, Pinpoint Penetration, Separator Very Dry.

\* Failed During This Reporting Period



# AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	PRECONDITIONING		CAPACITY CHECKS AFTER 88-DAY INTERVALS								CYCLES TO PACK FAILURE
					INITIAL	* (See Note)	FIRST 88 DAYS	88 SECOND DAYS	88 THIRD DAYS	88 FOURTH DAYS	88 FIFTH DAYS	88 SIXTH DAYS	88 SEVENTH DAYS	88 EIGHTH DAYS	
G.E. 3 A.H.	63	1.5	15	0	3.48		3.18	3.12	3.05	3.03	3.05	2.96	3.30	3.50	
	64		25	0	3.50		3.33	3.70	3.38	3.35	3.42	3.27	3.12		
	15		25	25	4.00		3.38	2.93	2.33	1.95	1.47	1.15	1.10		
	16		40	25	4.08		2.75	2.10	1.35						5013
	39		15	50/40	1.65	2.43 (779)	2.10	1.53	1.25	1.17	0.70				8109
	40		25	50/40	1.80	2.56 (1440)	0.88*	0.88							2509
G.E. 3 A.H.	67	3	15	0	3.63		3.25	3.40	3.53	2.97	3.25	2.95			
	68		25	0	3.50		3.35	3.53	3.40	3.27	3.25	2.93	2.87		
	19		25	25	3.93		3.78	3.48	3.15	3.00	2.78	2.48	2.29	2.20	
	20		40	25	3.78		3.00	2.35	2.07	1.83	2.00	1.62	1.47	1.20	
	43		15	50/40	1.77	2.63 (320)	2.20	1.61	1.65						2656
	44		25	50/40	1.60	2.00 (327)	1.35	1.19	1.15	1.10	0.95	0.88			
Gould 3.5 A.H.	51	1.5	15	0	3.62		4.00	3.33	3.41	3.21	3.35	3.15	3.77	3.00	
	52		25	0	3.33		3.85	3.53	3.18	3.30	3.24	2.80	2.65		
	3		25	25	4.00		3.82	2.92	2.25						4751
	4		40	25	3.94		3.38	2.77							3164
	27		15	50/40	1.53	2.63 (779)	2.07	1.95	1.90						4485
	28		25	50/40	1.55	2.07 (1424)	2.86								1811
Gould 3.5 A.H.	55	3	15	0	3.27		3.59	3.15	3.33	3.33	3.27	3.03	2.77		
	56		25	0	3.50		3.91	3.53	3.65	3.41	3.38	3.30	3.27		
	7		25	25	4.32		4.03	3.79	3.53	2.77	2.28	2.51			
	8		40	25	4.29		3.65	3.35	3.03						2494
	31		15	50/40	1.60	1.31 (329)	1.75	1.98	2.16						2524
	32		25	50/40	1.55	1.66 (495)	1.49								975

\* Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.

\*\* Still at 50° C.

# AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	PRECONDITIONING		CAPACITY CHECKS AFTER 88-DAY INTERVALS								CYCLES TO PACK FAILURE
					INITIAL	* (See Note)	FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	
Sonotone 5 A.H.	49	1.5	15	0	5.45		5.54	5.50	4.96	4.79	4.71	4.50	4.54		
	50		25	0	5.04		4.96	4.58	4.25	3.79	3.67	3.67	3.46		
	1		25	25	5.42		3.67	2.33	2.88	2.79	2.21	2.58	2.80	2.46	
	2		40	25	6.42		4.38	4.17	3.25	3.00					6671
	25		15	50/40	3.08	3.63 (703)	2.25	1.83	2.04	1.17	1.17	1.54	0.83		
	26		25	50/40	3.17	3.17 (445)	2.75	2.93							3625
Sonotone 5 A.H.	53	3	15	0	5.67		5.79	5.67	5.42	5.33	5.50	5.54	5.00		
	54		25	0	4.92		3.96	3.96	4.13	3.96	3.75	3.29	3.38		
	5		25	25	5.71		4.58	3.04	2.04	2.13	2.13	2.08	2.21		
	6		40	25	5.83		4.50	3.29	3.25	2.92	2.33	2.33	2.00	2.13	
	29		15	50/40	3.33	4.92 (223)	2.75	2.38	2.42	2.08	1.96	1.29	1.79		
	30		25	50/40	3.75	3.50 (183)	1.88	2.88	2.38	1.67	1.21				4141
Gulton 6 A.H.	61	1.5	15	0	5.00		5.10	5.40	4.45	3.15	2.60	2.15	1.75		
	62		25	0	5.00		4.75	3.80	4.35	3.55	3.30	3.30	3.95		
	13		25	25	5.80		2.75	3.85	2.70						4021
	14		40	25	6.40		3.45								2086
	37		15	50/40	2.75	3.60 (239)	1.70	2.45	1.85	2.00					6064
	38		25	50/40	2.65	2.90 (114)	1.55								1377
Gulton 6 A.H.	65	3	15	0	4.50		5.45	5.35	5.15	4.50	4.50	5.15	4.20		
	66		25	0	4.25		5.00	3.50	2.50	3.80	3.90	3.45			4414
	17		25	25	5.80		3.65	3.45	2.50	2.30					2885
	18		40	25	4.55		4.95	3.16							1550
	41		15	50/40	2.75	4.55 (239)	2.05	1.63							1689
	42		25	50/40	2.60	3.80 (96)	2.15	2.10	2.35	1.85	1.50	1.30			4133

\* Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.

# AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	PRECONDITIONING		CAPACITY CHECKS AFTER 88-DAY INTERVALS								CYCLES TO PACK FAILURE
					INITIAL	*(See Note)	FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	
G.E. 12 A.H.	110	1.5	15	0	13.9		12.7	10.4	13.0	12.5	14.1	13.7	14.3		
	124		25	0	14.2		13.5	12.9	12.8	11.4	11.5	11.7	10.8		
	82		25	25	15.2		8.00	5.55	5.50	5.40	5.70	5.00	11.70		
	96		40	25	14.8		6.00	7.65							4020
	85		15	50/40	6.80	8.20 (334)	5.00	4.70	5.00	4.90	5.00	1.90	4.50		
	99		25	50/40	6.90	6.00 (195)	4.90	5.20	4.40						4853
G.E. 12 A.H.	111	3	15	0	14.2		13.2	10.7	11.0	12.1	12.9	12.0	11.4		
	125		25	0	14.6		13.0	12.1	11.9	12.2	12.9	11.7	11.2		
	83		25	25	15.2		11.7	8.20	6.13	5.20	4.80	4.40	5.10		
	97		40	25	14.9		5.60	5.86	7.90	8.20	6.80	5.50	5.70		
	86		15	50/40	7.10	8.20 (205)	6.30	3.70	4.00	3.50	2.90	2.30	4.40		
	100		25	50/40	7.00	9.80 (70)	3.80	4.70	5.70	5.10	4.00	4.00			
Gould 20 A.H.	84	1.5	15	0	22.5		27.7	26.5	24.2	24.7	21.7	22.3	19.8		
	98		25	0	23.1		21.2	15.2	18.7	17.2	17.5	13.5	13.5		
	104		25	25	25.0		18.5	14.0							2980
	118		40	25	24.7		23.3								2937
	112		15	50/40	9.67	6.83 (183)	15.7	15.3	12.5	12.4					5213
	126		25	50/40	9.00	13.9 (1326)	15.2								1574
Gould 20 A.H.	80	3	15	0	23.0		23.2	21.5	20.3	25.8	19.7	18.3	16.7		
	94		25	0	23.0		17.5	25.0	18.2	18.8	16.8	17.0	15.8		
	105		25	25	23.3		23.5	22.2	21.3	21.2	20.7	10.5	20.5		
	119		40	25	24.8		24.7	21.7							1793
	108		15	50/40	9.50	9.67 (47)	11.8	14.8	16.8	15.2	12.3				
	122		25	50/40	9.33	7.50 (756)	8.17*								983

\* Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.

\*\* Still at 50° C.

# AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	PRECONDITIONING		CAPACITY CHECKS AFTER 88-DAY INTERVALS								CYCLES TO PACK FAILURE
					INITIAL	*(See Note)	FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	
Gulton 20 A.H.	101	1.5	15	0	17.2		12.5	5.67							3631
	115		25	0	17.7		11.2								2288
	73		25	25	23.3		7.17	9.50	7.83	8.67	8.83				7763
	87		40	25	23.3										627
	76		15	50/40	10.3	13.8 (172)	6.50	4.83	5.50	4.67	5.00	5.17			
	90		25	50/40	9.00	11.3 (65)	6.00	10.3	7.33**						4045
Gulton 20 A.H.	102	3	15	0	16.7		18.8	25.2	20.3	19.5	17.3	17.0	15.0		
	116		25	0	21.7		20.7	21.8	19.3	17.5	15.2	15.8	13.5		
	74		25	25	20.3		6.17	7.17							1754
	88		40	25	19.8										358
	77		15	50/40	9.50	12.7 (71)	7.33	5.33	4.83	5.33	4.67	5.00	5.17		
	91		25	50/40	9.17	10.3 (47)	6.67	6.67	7.67	6.83	7.17	5.50			
Yardney 12 A.H.	57	24	50	0	13.8		8.60								166
	33		50	40	13.5		12.0								210
Gulton 6 A.H.	79	24	50	25	6.60		3.55	4.40	4.25	4.05	3.50				
G.E. 12 A.H.	93	24	50	40***	13.0		7.60	(40°C) 6.50	(40°C) 5.00						349
Gulton 50 A.H.	95	1.5	25	0	54.6		59.6	45.4							3127
	123		15	40	27.9										

\* Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.

\*\* Two cells only; pack failed during capacity check.

\*\*\* Changed from 25° to 40° C ambient after 173 cycles.

# AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	INITIAL PRECONDI- TIONING	CAPACITY CHECKS AFTER 88-DAY INTERVALS										CYCLES TO PACK FAILURE
					FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	NINTH 88 DAYS	TENTH 88 DAYS	
Sonotone 243	1.5	15	0	3.23	3.55	3.47	3.50								
(Triple 231		25	0	2.88	3.05	2.78	2.72								
Sealed) 203		25	25	3.35	1.40	1.17									
3 A.H. 202		40	25	3.60	1.32										
226		15	40	3.53											
237		25	40	3.48	1.05										
Sonotone 175	1.5	25	-20	4.92											
(Stabis- 289		40	-20	4.96											
tor) 92		25	0	3.38	2.92										
5 A.H. 322		40	0	4.13	2.42										
273		25	25	5.33	2.33										
287		40	25	5.50	3.66										
299		25	40	4.21	1.88										
312		40/15	40	3.71	1.04										

8.9

# AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	INITIAL PRECONDI- TIONING	CAPACITY CHECKS AFTER 88-DAY INTERVALS										CYCLES TO PACK FAILURE
						FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	NINTH 88 DAYS	TENTH 88 DAYS	
Gulton (Comm.) 4 A.H.	315	1.5	15	0	5.04	3.57	4.03	4.00	3.80	4.07						
	326		25	0	4.87	4.00	3.87	3.73	3.73							
	204		25	25	4.63	2.47	2.07	1.83	1.80	3.67	1.83					
	214		40	25	5.00	2.00	2.07	1.87	1.93	1.93						
	228		15	40	4.20	1.77	1.67	1.47	1.53	1.72						
	240		25	40	3.37	1.17	1.13	1.30	1.03	1.30						
Gulton 12 A.H.	216	1.5	15	0	14.0	14.0	14.1	14.2								
	301		25	0	14.2	14.5	14.4	14.2								
	227		25	25	14.1	5.90	3.50	4.10								
	296		40	25	13.3	4.70	3.40	5.00								
	78		15	40	6.80	4.30	3.10	3.30								
	290		25	40	11.4	5.40	3.60	3.70								
Gulton (HSI) 6 A.H.	213	1.5	25	0	7.30	7.30	7.25	7.20								
	218		40	25	6.90	3.00	3.60	3.30								
	238		25	40	5.00	1.75	2.00	1.55								
Yardney (AgZn)	9	24	42	25	14.0											57

# AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	INITIAL PRECONDI- TIONING	CAPACITY CHECKS AFTER 88-DAY INTERVALS										CYCLES TO PACK FAILURE
						FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	NINTH 88 DAYS	TENTH 88 DAYS	
Gulton (Nimbus) 5 A.H.	117	1.5	15	0	5.00	5.17	5.46									
	121		25	0	5.38	5.38	5.33									
	120		15	25	5.25	5.40	4.17									
	318		25	25	5.46	2.55	1.67									
	127		15	40	3.29	1.67	1.50									
	128		25	40	3.04	1.42	1.54									
Gulton 6 A.H. (Third elec- trode)	59	1.5	25	0	7.15	7.00	6.20									
	71		40	0	7.25	7.50	7.00									
	11		40	25	7.10	3.15	6.20	4.35								
	23		25	25	5.95	3.85	5.20	4.00								
	35		15	40	2.95	2.25	1.60									
	47		25	40	3.95	2.10	2.05									
G.E. (Nimbus) 5 A.H.	103	1.5	15	0	5.42	5.08	5.38									
	107		25	0	5.21	5.50	5.46									
	106		15	25	4.67	4.13	4.13	3.50								
	304		25	25	5.58	3.58	2.54									
	113		15	40	3.67	2.42	2.25	1.83								
	114		25	40	3.83	2.25	1.71									
G.E. 12 A.H. (Third elec- trode)	60	1.5	25	0	15.0											
	72															
	12		25	25	10.2											
	24		40	25	9.10											
	36															
	48		25/40	40/0	5.30*											
					15.2											

\* At 40° C.

## 64.

[illegible]



## 62

[illegible]

MFR.	CAPACITY A. H.	PACK NO.	TEMP °C.	ORBIT PERIOD (HRS)		PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED			CELLS REMAIN- ING IN PACK	
				DISCHARGE	CHARGE				INITIAL	FINAL	DIFFERENCE	INITIAL	FINAL
G.E. (pages 72-76)	3	63	0	0.5	1.0	15	115	1.55	11979	12440	461	10	10
		64	0	"	"	25	"	"	11957	12414	457	10	10
		15	25	"	"	25	125	1.49		FAILED			
		16	25	"	"	40	"	"		FAILED			
		39	40	"	"	15	160	1.45		FAILED			
		40	40	"	"	25	"	1.41		FAILED			
		67	0	"	2.5	15	115	1.55	5815	5994	179	10	10
		68	0	"	"	25	"	"	5872	6079	207	10	10
		19	25	"	"	25	125	1.49	5847	6054	207	10	10
		20	25	"	"	40	"	"		FAILED			
		43	40	"	"	15	160	1.45		FAILED			
		44	40	"	"	25	"	"		FAILED			
GOULD (pages 77-80)	3.5	51	0	"	1.0	15	115	1.55	11996	12457	455	10	10
		52	0	"	"	25	"	"	11666	12123	457	5	5
		3	25	"	"	25	125	1.49		FAILED			
		4	25	"	"	40	"	"		FAILED			
		27	40	"	"	15	160	1.45		FAILED			
		28	40	"	"	25	"	"		FAILED			
		55	0	"	2.5	15	115	1.55	5865	6072	207	10	10
		56	0	"	"	25	"	"	5838	6045	207	10	10
		7	25	"	"	25	125	1.49		FAILED			
		8	25	"	"	40	"	"		FAILED			
		31	40	"	"	15	160	1.45		FAILED			
		32	40	"	"	25	"	1.41		FAILED			

MFR.	CAPACITY A. H.	PACK NO.	TEMP °C.	ORBIT PERIOD (HRS)		PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED			CELLS REMAIN- ING IN PACK	
				DISCHARGE	CHARGE				INITIAL	FINAL	DIFFERENCE	INITIAL	FINAL
SONOTONE (pages 81-87)	5	49	0	0.5	1.0	15	115	1.55	11582	12052	470	8	8
		50	0	"	"	25	"	"	11710	12069	359	10	10
		1	25	"	"	25	125	1.49	11362	11745	383	7	7
		2	25	"	"	40	"	"		FAILED			
		25	40	"	"	15	160	1.45		FAILED			
		26	40	"	"	25	"	"		FAILED			
		53	0	"	2.5	15	115	1.55	5731	5939	207	10	10
		54	0	"	"	25	"	"	5751	5919	168	10	10
		5	25	"	"	25	125	1.49	5574	5782	208	8	8
		6	25	"	"	40	"	"		FAILED			
		29	40	"	"	15	160	1.45	5488	5604	116	6	6
		30	40	"	"	25	"	"		FAILED			
GULTON (pages 88-89)	6	61	0	"	1.0	15	115	1.55		FAILED			
		62	0	"	"	25	"	"	11279	11742	463	6	6
		13	25	"	"	25	125	1.49		FAILED			
		14	25	"	"	40	"	"		FAILED			
		37	40	"	"	15	160	1.45		FAILED			
		38	40	"	"	25	"	"		FAILED			
		65	0	"	2.5	15	115	1.55	5707	5851	144	9	8
		66	0	"	"	25	"	"		FAILED			
		17	25	"	"	25	125	1.49		FAILED			
		18	25	"	"	40	"	"		FAILED			
		41	40	"	"	15	160	1.45		FAILED			
		42	40	"	"	25	"	"		FAILED			

49

MFR.	CAPACITY A. H.	PACK NO.	TEMP °C.	ORBIT PERIOD (HRS)		PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED			CELLS REMAIN- ING IN PACK	
				DISCHARGE	CHARGE				INITIAL	FINAL	DIFFERENCE	INITIAL	FINAL
G. E. (pages 90-95)	12	110	0	0.5	1.0	15	115	1.55	11418	11834	416	5	5
		124	0	"	"	25	"	"	11185	11601	416	5	5
		82	25	"	"	25	125	1.49		FAILED			
		96	25	"	"	40	"	"		FAILED			
		85	40	"	"	15	160	1.45		FAILED			
		99	40	"	"	25	"	"		FAILED			
		111	0	"	2.5	15	115	1.55	5715	5898	183	5	5
		125	0	"	"	25	"	"	5708	5891	183	5	5
		83	25	"	"	25	125	1.49	5721	5904	183	5	5
		97	25	"	"	40	"	"		FAILED			
		86	40	"	"	15	160	1.45	5525	5709	184	5	5
		100	40	"	"	25	"	"		FAILED			
GOULD (pages 96-99)	20	84	0	"	1.0	15	115	1.55	11312	11792	470	5	5
		98	0	"	"	25	"	"		FAILED			
		104	25	"	"	25	125	1.49		FAILED			
		118	25	"	"	40	"	"		FAILED			
		112	40	"	"	15	160	1.45		FAILED			
		126	40	"	"	25	"	1.41		FAILED			
		80	0	"	2.5	15	115	1.55	5661	5868	207	5	5
		94	0	"	"	25	"	"	5525	5728	203	5	5
		105	25	"	"	25	125	1.49	5463	5581	118	4	3
		119	25	"	"	40	"	"		FAILED			
		108	40	"	"	15	160	1.45		FAILED			
		122	40	"	"	25	"	1.41		FAILED			

MFR.	CAPACITY A. H.	PACK NO.	TEMP °C.	ORBIT PERIOD (HRS.)		PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED			CELLS REMAIN- ING IN PACK	
				DISCHARGE	CHARGE				INITIAL	FINAL	DIFFERENCE	INITIAL	FINAL
GULTON (pages 100-102)	20	101	0	0.5	1.0	15	115	1.55		FAILED			
		115	0	"	"	25	"	"		FAILED			
		73	25	"	"	25	125	1.49		FAILED			
		87	25	"	"	40	"	"		FAILED			
		76	40	"	"	15	160	1.45		FAILED			
		90	40	"	"	25	"	"		FAILED			
		102	0	"	2.5	15	115	1.55	5489	5696	207	4	4
		116	0	"	"	25	"	"	5331	5516	185	5	5
		74	25	"	"	25	125	1.49		FAILED			
		88	25	"	"	40	"	"		FAILED			
		77	40	"	"	15	160	1.45	5500	5644	144	5	4
		97	40	"	"	25	"	"		FAILED			
G E. HIMBUS (pages 103-108)	5	103	0	"	1.0	15	110	1.49	4314	4728	414	5	5
		107	0	"	"	25	"	"	3673	4081	408	5	5
		106	25	"	"	15	120	"	4287	4748	461	5	5
		304	25	"	"	25	"	"	3594	4051	457	4	4
		113	40	"	"	15	130	"	4289	4750	461	5	5
		114	40	"	"	25	"	"	3563	4020	457	5	5
GULTON HIMBUS (pages 109-114)	5	117	0	"	"	15	110	"	4108	4505	397	5	5
		121	0	"	"	25	"	"	3675	4083	408	5	5
		120	25	"	"	15	120	"	4211	4672	461	5	5
		318	25	"	"	25	"	"	3594	4051	457	5	5
		127	40	"	"	15	130	"	4258	4671	413	5	5
		128	40	"	"	25	"	"	3556	3965	409	4	4

MFR.	CAPACITY A. H.	PACK NO.	TEMP. °C.	ORBIT PERIOD (HRS)		PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED			CELLS REMAIN- ING IN PACK	
				DISCHARGE	CHARGE				INITIAL	FINAL	DIFFERENCE	INITIAL	FINAL
YARDNEY	12	57	0	1.0	23.0	50	*	1.50		FAILED			
		33	40	"	"	"	*	1.50		FAILED			
GULTON (page )	6	79	25	1.0	23.0	50	200	1.49		FAILED			
G.E. (page )	12	93	25**	1.0	23.0	50	200***	1.49**		FAILED			
GULTON (page )	50	95	0	0.5	1.0	25	115	1.55		FAILED			
		123	40	"	"	15	160	1.45		FAILED			
DELCO (pages ) (NaOH) →	25	75	25	1.0	23.0	40	*	1.97		FAILED			
		89	25	"	"	"	*	"		FAILED			
		288	25	0.5	2.5	"	*	"		DISCONTINUED			
		188	25	"	"	"	*	"		FAILED			
DELCO (pages )	40	275	25	1.0	23.0	25	*	1.97		DISCONTINUED			
YARDNEY	12 AgZn Lim- ited electrolyte	9	25	1.0	23.0	42 (5 amps)	(500 Ma.)	1.97		FAILED			

\* DOES NOT APPLY.

\*\* CHANGED TO 40°C, 1.45 V/CELL LIMIT AFTER CYCLE 173.

\*\*\* INCREASED TO 250% AFTER CYCLE 266.

MFR.	CAPACITY A. H.	PACK NO.	TEMP. °C.	ORBIT PERIOD (HRS)		PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED			CELLS REMAIN- ING IN PACK	
				DISCHARGE	CHARGE				INITIAL	FINAL	DIFFERENCE	INITIAL	FINAL
GULTON (pages 115-120)	4	315	0	0.5	1.0	15	115	1.55	8236	8538	302	5	5
		326	0	"	"	25	"	"	8546	9009	463	5	5
		204	25	"	"	25	125	1.49	8402	8810	408	5	5
		214	25	"	"	40	"	"	7931	8369	438	4	4
		228	40	"	"	15	160	1.45	8295	8703	408	5	5
		240	40	"	"	25	"	"	8329	8737	408	4	4
GULTON (pages 121-124)	12	216	0	"	"	15	115	1.55	5338	5746	408	5	5
		301	0	"	"	25	115	1.55	6130	6610	480	4	4
		227	25	"	"	25	125	1.49	5590	6003	413	5	5
		296	25	"	"	40	125	1.49		FAILED			
		78	40	"	"	15	160	1.45	6085	6563	478	4	4
		290	40	"	"	25	160	1.45		FAILED			
GULTON pages 125-127	(HSL) 6	213	0	"	"	25	115	1.55	5244	5713	475	5	5
		218	25	"	"	40	125	1.49	5235	5583	348	5	4
		238	40	"	"	25	160	1.45	5040	5285	245	4	3
GULTON pages 128-133	3 (TRIPLE STACKED)	243	0	"	"	15	115	1.55	3145	3606	461	5	5
		231	0	"	"	25	115	"	3145	3606	461	5	5
		203	25	"	"	25	125	1.49	3304	3765	461	5	5
		202	25	"	"	40	125	"	2983	3446	463	4	4
		226	40	"	"	15	160	1.45	3133	3594	461	5	5
		237	40	"	"	25	160	"	3148	3564	416	5	5

MFR.	CAPACITY A. H.	PACK NO.	TEMP °C.	ORBIT PERIOD (HRS.)		PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED			CELLS REMAIN- ING IN PACK	
				DISCHARGE	CHARGE				INITIAL	FINAL	DIFFERENCE	INITIAL	FINAL
GULTON  (pages 134-139)	6 (THIRD ELECTRODE)	59	0	0.5	1.0	25	—	—	4118	4550	432	4	4
		71	0	"	"	40	—	—	4185	4533	348	4	4
		11	25	"	"	40	—	—	5297	5680	383	4	4
		23	25	"	"	25	—	—	5282	5664	382	5	5
		35	40	"	"	15	—	—	3236	3585	349	5	5
		47	40	"	"	25	—	—	3897	4330	433	5	5
G.E.  (pages 140-141)	12 (THIRD ELECTRODE)	60	0	"	"	25	—	—	1747	2180	435	5	5
		72	0	"	"	40	—	—					
		12	25	"	"	25	—	—	DISCONTINUED				
		24	25	"	"	40	—	—	DISCONTINUED				
		36	40	"	"	15	—	—					
		48	40	"	"	25	—	—	1089	1521	432	5	5
142-148	5 (STATISTOR)	175	-20	"	"	25	—	—	1393	1817	424	5	3
		289	-20	"	"	40	—	—	1130	1512	391	4	3
		92	0	"	"	25	—	—	2234	2670	436	5	5
		322	0	"	"	40	—	—	2109	2462	354	4	4
		273	25	"	"	25	—	—	2584	3000	416	4	3
		287	25	"	"	40	—	—		Failed			
		299	40	"	"	25	—	—	2433	2721	288	5	5
		312	40	"	"	40	—	—	2333	2814	481	4	4



MFR.	CAPACITY A. H.	PACK NO.	TEMP °C.	ORBIT PERIOD (HRS)		PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED			CELLS REMAIN- ING IN PACK	
				DISCHARGE	CHARGE				INITIAL	FINAL	DIFFERENCE	INITIAL	FINAL
YARDNEY 149	12.0	185	-20	0.5	1.0	25	130	1.60					
		197	0	"	"	"	"	1.58					
		182	25	"	"	"	"	1.55	195	660	465	5	5
DELCO Page 150	200	609	25	1.0	23.0	40	*	1.97	44	72	28	10	10

\* Does Not Apply

MFR.	CAPACITY A. H.	PACK NO.	TEMP °C.	ORBIT PERIOD (HRS.)		PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED			CELLS REMAIN- ING IN PACK	
				DISCHARGE	CHARGE				INITIAL	FINAL	DIFFERENCE	INITIAL	FINAL
YARDNEY (pages 151-153)	5.0	257	0	1.0	23.0	20	(3.30A)	1.50	129	157	28	5	5
		409	25	"	"	"	"	"		FAILED			
		21	25	"	"	"	"	"		FAILED			
		69	25	"	"	"	"	"	86	114	28	5	5
		45	40	"	"	"	"	"		FAILED			
		233	25	"	"	"	"	"	86	114	28	5	5
GULTON (pages 154-161)	5.6	232	-20	0.5	1.0	25	115	1.55	398	859	461	5	5
		244	-20	"	"	"	"	"	398	859	461	5	5
		200	0	"	"	"	"	"	675	1136	461	5	5
		390	0	"	"	"	"	"	691	1154	463	5	5
		276	25	"	"	"	125	1.49	804	1267	463	5	5
		396	25	"	"	"	"	"	800	1285	485	5	5
		230	40	"	"	"	160	1.45	908	1195	287	5	5
		242	40	"	"	"	"	"	913	1374	461	5	5
GULTON Coulometer 162	3.6	239	25	"	"	40	(3.6A)	1.48	1268	1681	413	10	10
SONOTONE Coulometer page 163	5.0		25	0.5	1.0	30	(6.30A)	—	7081	7534	453	5	5
GULTON Sherfey page 164	3.6		25	0.5	1.0	40	60	—	2361	2815	454	10	9

\* DOES NOT APPLY

PACK NO. 63  
G.E. 3 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 0.90	1	2	3	4	5	6	7	8	9	10
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1223.	12.36	.91	1.25	1.25	1.25	1.22	1.25	1.23	1.23	1.23	1.24	1.22
12007.	12.28	.91	1.24	1.25	1.23	1.21	1.23	1.22	1.23	1.23	1.23	1.22
12044.	12.26	.91	1.24	1.25	1.23	1.21	1.23	1.22	1.22	1.23	1.23	1.22
12071.	12.24	.91	1.24	1.24	1.23	1.21	1.23	1.22	1.22	1.22	1.22	1.22
12122.	12.40	.91	1.26	1.26	1.25	1.22	1.24	1.23	1.24	1.24	1.24	1.23
12151.	12.40	.91	1.26	1.25	1.26	1.23	1.25	1.23	1.24	1.23	1.24	1.23
12186.	12.39	.91	1.25	1.25	1.25	1.22	1.25	1.23	1.23	1.23	1.24	1.23
12266.	12.36	.91	1.25	1.25	1.25	1.22	1.25	1.23	1.23	1.23	1.23	1.22
12295.	12.38	.91	1.25	1.25	1.26	1.22	1.25	1.23	1.23	1.23	1.24	1.22
12346.	12.36	.91	1.25	1.25	1.25	1.22	1.24	1.23	1.23	1.23	1.23	1.23
12375.	12.34	.91	1.24	1.25	1.26	1.22	1.24	1.23	1.23	1.22	1.23	1.23
12408.	12.35	.91	1.25	1.25	1.25	1.22	1.24	1.22	1.23	1.23	1.23	1.23
12440.	12.35	.91	1.25	1.25	1.25	1.22	1.24	1.23	1.23	1.23	1.24	1.23

END OF  
DISCHARGE

.52

1223.	15.50	.22	1.60	1.48	1.61	1.55	1.64	1.57	1.48	1.51	1.48	1.53
12007.	15.10	.19	1.53	1.46	1.56	1.52	1.57	1.52	1.46	1.51	1.45	1.50
12044.	15.04	.20	1.55	1.46	1.54	1.52	1.57	1.53	1.45	1.50	1.44	1.50
12071.	15.02	.20	1.55	1.45	1.53	1.51	1.57	1.52	1.45	1.50	1.44	1.49
12122.	15.51	.22	1.62	1.48	1.60	1.55	1.64	1.58	1.48	1.54	1.48	1.53
12151.	15.52	.22	1.61	1.48	1.62	1.55	1.65	1.56	1.49	1.53	1.48	1.54
12186.	15.52	.23	1.60	1.49	1.61	1.56	1.65	1.56	1.49	1.51	1.48	1.54
12266.	15.56	.23	1.61	1.48	1.62	1.56	1.65	1.59	1.48	1.52	1.48	1.54
12295.	15.55	.23	1.61	1.48	1.62	1.56	1.65	1.58	1.48	1.52	1.48	1.54
12346.	15.51	.22	1.60	1.48	1.61	1.56	1.65	1.59	1.48	1.52	1.48	1.54
12375.	15.48	.22	1.60	1.48	1.61	1.55	1.64	1.57	1.48	1.52	1.47	1.54
12408.	15.54	.22	1.61	1.48	1.61	1.55	1.65	1.58	1.48	1.52	1.47	1.55
12440.	15.55	.23	1.60	1.49	1.61	1.56	1.65	1.59	1.49	1.52	1.48	1.54

END OF  
CHARGE

72

PACK NO. 64  
G.E. 3 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	1	2	3	4	5	6	7	8	9	10	
11981.	12.03	1.50	1.21	1.22	1.20	1.21	1.21	1.20	1.21	1.20	1.20	1.19	END OF DISCHARGE
12018.	11.99	1.49	1.21	1.22	1.20	1.21	1.21	1.20	1.20	1.20	1.20	1.19	
12045.	12.02	1.50	1.21	1.22	1.20	1.21	1.21	1.20	1.20	1.20	1.20	1.19	
12096.	12.07	1.51	1.21	1.22	1.21	1.21	1.22	1.21	1.20	1.20	1.20	1.19	
12125.	12.09	1.49	1.21	1.22	1.22	1.21	1.23	1.21	1.20	1.20	1.20	1.19	
12160.	12.06	1.51	1.21	1.22	1.21	1.21	1.23	1.20	1.20	1.19	1.20	1.19	
12205.	12.01	1.51	1.21	1.21	1.21	1.21	1.22	1.20	1.20	1.19	1.19	1.18	
12240.	11.99	1.51	1.20	1.21	1.21	1.20	1.22	1.19	1.20	1.19	1.19	1.18	
12269.	12.02	1.51	1.21	1.21	1.20	1.20	1.22	1.20	1.20	1.19	1.19	1.18	
12320.	12.01	1.50	1.20	1.21	1.21	1.21	1.21	1.20	1.20	1.19	1.20	1.19	
12357.	11.99	1.50	1.20	1.21	1.20	1.21	1.21	1.20	1.20	1.19	1.20	1.18	
12382.	12.03	1.50	1.21	1.22	1.21	1.21	1.22	1.20	1.20	1.20	1.20	1.19	
12414.	12.04	1.50	1.21	1.22	1.20	1.21	1.22	1.20	1.20	1.20	1.20	1.19	
		.86											
11981.	15.14	.27	1.49	1.53	1.54	1.57	1.51	1.48	1.47	1.50	1.51	1.51	END OF CHARGE
12018.	15.15	.32	1.50	1.54	1.54	1.54	1.52	1.48	1.47	1.51	1.52	1.51	
12045.	15.15	.29	1.50	1.53	1.55	1.56	1.52	1.48	1.47	1.51	1.52	1.52	
12096.	15.40	.33	1.52	1.54	1.59	1.62	1.53	1.50	1.50	1.52	1.53	1.53	
12125.	15.42	.34	1.51	1.54	1.60	1.63	1.52	1.51	1.50	1.52	1.53	1.52	
12160.	15.40	.34	1.51	1.53	1.60	1.63	1.52	1.51	1.50	1.52	1.53	1.54	
12205.	15.43	.34	1.51	1.53	1.61	1.64	1.53	1.51	1.50	1.51	1.53	1.52	
12240.	15.38	.32	1.51	1.53	1.60	1.63	1.52	1.50	1.49	1.52	1.53	1.53	
12269.	15.38	.33	1.52	1.53	1.59	1.63	1.52	1.50	1.49	1.51	1.53	1.52	
12320.	15.38	.32	1.51	1.54	1.60	1.64	1.52	1.50	1.49	1.51	1.53	1.53	
12357.	15.32	.31	1.51	1.53	1.59	1.62	1.52	1.49	1.48	1.52	1.52	1.52	
12382.	15.45	.34	1.52	1.54	1.60	1.64	1.53	1.51	1.50	1.53	1.53	1.53	
12414.	15.46	.35	1.52	1.55	1.60	1.64	1.52	1.51	1.51	1.51	1.53	1.53	

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PACK NO. 67  
G.E. 3 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 0.90	1	2	3	4	5	6	7	8	9	10	
5846.	12.49	.89	1.26	1.26	1.23	1.26	1.26	1.25	1.25	1.25	1.25	1.24	END OF
5885.	12.10	.90	1.20	1.21	1.21	1.23	1.21	1.21	1.22	1.21	1.21	1.21	DISCHARGE
5916.	12.50	.90	1.25	1.25	1.23	1.25	1.26	1.25	1.25	1.23	1.26	1.24	
5956.	12.43	.90	1.24	1.25	1.23	1.25	1.26	1.24	1.25	1.23	1.25	1.23	
5994.	12.43	.90	1.25	1.25	1.23	1.25	1.26	1.24	1.25	1.23	1.24	1.24	
		.21											
5846.	15.15	.08	1.55	1.49	1.47	1.57	1.52	1.52	1.52	1.50	1.49	1.52	END OF
5885.	15.01	.09	1.50	1.51	1.51	1.56	1.53	1.53	1.48	1.54	1.39	1.47	CHARGE
5916.	15.31	.11	1.55	1.49	1.49	1.56	1.55	1.54	1.53	1.52	1.51	1.54	
5956.	15.39	.07	1.56	1.47	1.47	1.58	1.57	1.55	1.54	1.52	1.54	1.55	
5994.	15.40	.10	1.57	1.48	1.49	1.57	1.56	1.56	1.54	1.54	1.51	1.56	

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PACK NO. 68  
G.E. 3 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES										
			1	2	3	4	5	6	7	8	9	10	
5902.	12.17	1.51	1.22	1.23	1.22	1.24	1.21	1.23	1.23	1.22	1.25	1.23	END OF DISCHARGE
5942.	12.09	1.50	1.20	1.21	1.21	1.23	1.21	1.21	1.21	1.21	1.21	1.21	
5973.	12.09	1.51	1.19	1.20	1.21	1.22	1.22	1.21	1.21	1.20	1.20	1.20	
6013.	12.09	1.49	1.20	1.20	1.21	1.23	1.21	1.21	1.21	1.20	1.21	1.21	
6051.	12.07	1.51	1.19	1.21	1.20	1.22	1.21	1.20	1.21	1.20	1.21	1.20	
6079.	12.03	1.52	1.19	1.20	1.21	1.22	1.21	1.21	1.21	1.20	1.19	1.20	
		.34											
5902.	15.60	.25	1.60	1.62	1.58	1.54	1.59	1.59	1.55	1.59	1.42	1.52	END OF CHARGE
5942.	14.98	.12	1.50	1.51	1.50	1.55	1.52	1.52	1.48	1.54	1.39	1.47	
5973.	15.41	.17	1.55	1.58	1.57	1.56	1.57	1.58	1.51	1.57	1.40	1.49	
6013.	15.30	.15	1.54	1.55	1.56	1.58	1.55	1.56	1.50	1.57	1.40	1.48	
6051.	15.24	.15	1.53	1.53	1.54	1.58	1.54	1.54	1.50	1.55	1.40	1.49	
6079.	15.67	.17	1.59	1.61	1.57	1.64	1.59	1.59	1.54	1.61	1.39	1.51	

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PACK NO. 19  
G.E. 3 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGES											
			1	2	3	4	5	6	7	8	9	10		
5877.	11.93	1.51	1.21	1.22	1.20	1.22	1.19	1.21	1.20	1.20	1.20	1.20	1.20	END OF DISCHARGE
5917.	11.95	1.52	1.20	1.21	1.20	1.21	1.20	1.20	1.19	1.19	1.19	1.19		
5948.	11.90	1.52	1.19	1.20	1.20	1.20	1.20	1.19	1.18	1.18	1.18	1.18		
5988.	11.90	1.50	1.19	1.19	1.20	1.20	1.20	1.19	1.19	1.18	1.18	1.18		
6026.	11.88	1.51	1.19	1.20	1.19	1.20	1.19	1.19	1.18	1.18	1.18	1.18		
6054.	11.91	1.51	1.19	1.20	1.20	1.20	1.20	1.19	1.18	1.18	1.18	1.19		
		.38												
5877.	14.51	.37	1.47	1.47	1.45	1.43	1.46	1.45	1.44	1.44	1.44	1.45	END OF CHARGE	
5917.	14.56	.37	1.47	1.47	1.45	1.43	1.46	1.46	1.44	1.45	1.45	1.46		
5948.	14.48	.37	1.46	1.46	1.46	1.43	1.46	1.44	1.43	1.43	1.44	1.44		
5988.	14.43	.37	1.45	1.46	1.45	1.42	1.46	1.44	1.43	1.43	1.43	1.43		
6026.	14.42	.37	1.45	1.46	1.45	1.43	1.44	1.44	1.43	1.43	1.43	1.44		
6054.	14.53	.38	1.46	1.47	1.46	1.43	1.46	1.45	1.44	1.44	1.44	1.45		

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PACK NO. 51  
GOULD 3.5 A.H.

DEPTH OF DISCHARGE .15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.05	1	2	3	4	5	6	7	8	9	10	
12024.	12.47	1.04	1.25	1.24	1.21	1.26	1.24	1.25	1.23	1.28	1.27	1.25	END OF DISCHARGE
12061.	12.39	1.05	1.25	1.24	1.22	1.25	1.24	1.25	1.24	1.27	1.23	1.21	
12088.	12.34	1.04	1.25	1.24	1.21	1.26	1.24	1.24	1.24	1.26	1.22	1.19	
12139.	12.38	1.05	1.25	1.24	1.22	1.27	1.24	1.25	1.24	1.25	1.24	1.18	
12168.	12.38	1.04	1.25	1.24	1.23	1.28	1.24	1.25	1.24	1.25	1.24	1.17	
12203.	12.32	1.04	1.24	1.24	1.22	1.27	1.24	1.22	1.23	1.24	1.24	1.15	
12248.	12.36	1.05	1.24	1.23	1.22	1.26	1.23	1.21	1.23	1.24	1.23	1.26	
12283.	12.40	1.04	1.24	1.23	1.22	1.26	1.23	1.23	1.23	1.22	1.23	1.28	
12312.	12.42	1.04	1.24	1.23	1.22	1.26	1.24	1.25	1.23	1.22	1.23	1.27	
12392.	12.31	1.05	1.24	1.24	1.22	1.25	1.24	1.21	1.23	1.21	1.21	1.26	
12425.	12.33	1.05	1.24	1.23	1.22	1.26	1.24	1.23	1.23	1.20	1.23	1.24	
12457.	12.39	1.04	1.24	1.24	1.21	1.25	1.24	1.24	1.23	1.20	1.26	1.26	
		.60											
12024.	15.33	.56	1.56	1.58	1.57	1.47	1.57	1.55	1.56	1.53	1.46	1.45	END OF CHARGE
12061.	15.30	.57	1.56	1.59	1.58	1.46	1.58	1.53	1.56	1.60	1.43	1.41	
12088.	15.29	.56	1.57	1.59	1.58	1.48	1.61	1.50	1.56	1.57	1.43	1.41	
12139.	15.38	.62	1.56	1.59	1.59	1.49	1.59	1.56	1.56	1.58	1.45	1.41	
12168.	15.42	.63	1.56	1.59	1.60	1.49	1.58	1.58	1.60	1.62	1.46	1.41	
12203.	15.20	.59	1.56	1.58	1.59	1.47	1.57	1.46	1.55	1.54	1.44	1.41	
12248.	15.23	.60	1.56	1.58	1.59	1.47	1.54	1.45	1.55	1.54	1.44	1.46	
12283.	15.26	.62	1.56	1.59	1.60	1.48	1.54	1.46	1.56	1.49	1.44	1.51	
12312.	15.22	.62	1.56	1.58	1.60	1.48	1.56	1.48	1.56	1.45	1.44	1.49	
12392.	15.18	.62	1.56	1.59	1.60	1.47	1.59	1.46	1.56	1.44	1.43	1.46	
12425.	15.18	.63	1.56	1.59	1.60	1.48	1.57	1.47	1.56	1.44	1.45	1.44	
12457.	15.25	.61	1.56	1.59	1.59	1.47	1.60	1.48	1.56	1.44	1.46	1.47	

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PACK NO. 52  
GOULD 3.5 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.75	1	2	3	4	5	6	7	8	9	10	
11690.	5.94	1.74	1.20	1.21	.00	1.20	1.20	1.19	.00	.00	.00	.00	END OF DISCHARGE
11754.	5.98	1.73	1.21	1.22	.00	1.20	1.21	1.20	.00	.00	.00	.00	
11805.	5.93	1.74	1.19	1.20	.00	1.20	1.21	1.20	.00	.00	.00	.00	
11835.	5.95	1.72	1.19	1.21	.00	1.20	1.21	1.20	.00	.00	.00	.00	
11873.	5.93	1.74	1.18	1.20	.00	1.19	1.21	1.19	.00	.00	.00	.00	
11914.	5.93	1.74	1.18	1.20	.00	1.19	1.21	1.19	.00	.00	.00	.00	
11949.	5.91	1.76	1.18	1.20	.00	1.19	1.21	1.19	.00	.00	.00	.00	
11978.	5.92	1.76	1.18	1.19	.00	1.19	1.21	1.19	.00	.00	.00	.00	
12029.	5.93	1.74	1.18	1.21	.00	1.19	1.21	1.19	.00	.00	.00	.00	
12066.	5.92	1.73	1.19	1.20	.00	1.19	1.20	1.19	.00	.00	.00	.00	
12091.	5.93	1.75	1.19	1.20	.00	1.19	1.20	1.19	.00	.00	.00	.00	
12123.	5.92	1.76	1.18	1.21	.00	1.19	1.20	1.19	.00	.00	.00	.00	
		1.00											
11690.	7.69	.47	1.50	1.53	.00	1.59	1.55	1.56	.00	.00	.00	.00	END OF CHARGE
11754.	7.93	.68	1.56	1.60	.00	1.62	1.59	1.61	.00	.00	.00	.00	
11805.	7.77	.58	1.49	1.54	.00	1.61	1.58	1.59	.00	.00	.00	.00	
11835.	7.78	.59	1.49	1.55	.00	1.61	1.58	1.59	.00	.00	.00	.00	
11873.	7.71	.59	1.49	1.53	.00	1.61	1.58	1.59	.00	.00	.00	.00	
11914.	7.83	.62	1.50	1.57	.00	1.61	1.59	1.59	.00	.00	.00	.00	
11949.	7.81	.62	1.50	1.55	.00	1.62	1.59	1.59	.00	.00	.00	.00	
11978.	7.80	.67	1.50	1.53	.00	1.62	1.59	1.60	.00	.00	.00	.00	
12029.	7.86	.65	1.50	1.58	.00	1.62	1.59	1.60	.00	.00	.00	.00	
12066.	7.83	.66	1.52	1.53	.00	1.62	1.59	1.60	.00	.00	.00	.00	
12091.	7.85	.70	1.53	1.54	.00	1.62	1.59	1.60	.00	.00	.00	.00	
12123.	7.87	.67	1.51	1.59	.00	1.62	1.59	1.60	.00	.00	.00	.00	

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PACK NO. 56  
GOULD 3.5 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES											
			1.75	1	2	3	4	5	6	7	8	9		10
5869.	12.14	1.78	1.22	1.22	1.22	1.22	1.21	1.21	1.21	1.21	1.21	1.21	1.21	END OF DISCHARGE
5908.	12.11	1.77	1.21	1.22	1.22	1.22	1.21	1.20	1.21	1.21	1.20	1.21		
5939.	12.08	1.78	1.21	1.21	1.22	1.22	1.21	1.20	1.20	1.20	1.20	1.20		
5979.	12.05	1.77	1.20	1.21	1.21	1.21	1.21	1.20	1.20	1.20	1.20	1.20		
6017.	12.11	1.76	1.20	1.21	1.21	1.21	1.21	1.22	1.22	1.22	1.22	1.20		
6045.	12.03	1.77	1.20	1.21	1.21	1.21	1.21	1.19	1.20	1.20	1.20	1.20		
		.40												
5869.	15.55	.33	1.55	1.56	1.53	1.59	1.56	1.55	1.55	1.54	1.55	1.55	END OF CHARGE	
5908.	15.53	.35	1.55	1.56	1.53	1.59	1.56	1.55	1.55	1.54	1.55	1.55		
5939.	15.53	.35	1.55	1.56	1.53	1.58	1.57	1.55	1.54	1.53	1.54	1.55		
5979.	15.54	.34	1.55	1.56	1.52	1.59	1.57	1.55	1.54	1.53	1.54	1.55		
6017.	15.50	.35	1.55	1.56	1.51	1.58	1.56	1.55	1.53	1.54	1.55	1.55		
6045.	15.55	.33	1.55	1.56	1.52	1.60	1.57	1.56	1.54	1.54	1.55	1.55		

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PACK NO. 55  
GOULD 3.5 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 1.05	CELL VOLTAGES										
			1	2	3	4	5	6	7	8	9	10	
5895.	12.35	1.06	1.25	1.26	1.25	1.25	1.22	1.24	1.24	1.24	1.25	1.25	END OF
5935.	12.43	1.07	1.25	1.26	1.25	1.24	1.24	1.23	1.24	1.24	1.24	1.24	DISCHARGE
5966.	12.39	1.07	1.24	1.25	1.25	1.23	1.24	1.23	1.23	1.23	1.23	1.23	
6006.	12.38	1.05	1.24	1.24	1.25	1.24	1.24	1.23	1.23	1.23	1.24	1.23	
6044.	12.35	1.07	1.24	1.24	1.24	1.23	1.23	1.22	1.23	1.23	1.23	1.23	
6072.	12.38	1.04	1.24	1.25	1.25	1.24	1.24	1.23	1.23	1.23	1.23	1.23	
		.24											
5895.	15.03	.14	1.52	1.52	1.50	1.52	1.51	1.50	1.50	1.50	1.49	1.48	END OF
5935.	15.24	.24	1.53	1.55	1.53	1.54	1.53	1.52	1.52	1.52	1.51	1.50	CHARGE
5966.	15.24	.24	1.52	1.54	1.53	1.53	1.54	1.51	1.51	1.51	1.50	1.50	
6006.	15.23	.24	1.53	1.54	1.53	1.53	1.54	1.51	1.51	1.51	1.50	1.50	
6044.	15.23	.24	1.53	1.55	1.52	1.53	1.53	1.51	1.51	1.51	1.51	1.50	
6072.	15.27	.24	1.53	1.56	1.53	1.54	1.54	1.52	1.51	1.52	1.51	1.50	

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PACK NO. 49  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGES										
			1	2	3	4	5	6	7	8	9	10	
11618.	9.79	1.52	1.22	1.22	.00	1.21	1.22	1.23	1.24	1.23	.00	1.23	END OF DISCHARGE
11644.	9.63	1.54	1.20	1.20	.00	1.20	1.20	1.22	1.22	1.22	.00	1.21	
11682.	9.59	1.52	1.19	1.20	.00	1.19	1.19	1.21	1.22	1.21	.00	1.21	
11730.	9.79	1.51	1.22	1.23	.01	1.22	1.22	1.23	1.24	1.24	.00	1.23	
11756.	9.80	1.51	1.22	1.22	.01	1.22	1.22	1.23	1.24	1.23	.00	1.23	
11794.	9.79	1.49	1.21	1.22	.01	1.21	1.23	1.22	1.24	1.23	.00	1.23	
11842.	9.76	1.53	1.21	1.21	.00	1.21	1.21	1.22	1.24	1.23	.00	1.23	
11874.	9.75	1.50	1.21	1.22	.01	1.21	1.22	1.21	1.24	1.23	.00	1.23	
11906.	9.74	1.51	1.21	1.21	.01	1.21	1.22	1.21	1.23	1.23	.00	1.23	
11954.	9.73	1.50	1.21	1.22	.00	1.20	1.22	1.22	1.23	1.23	.00	1.22	
11986.	9.74	1.50	1.21	1.22	.01	1.21	1.21	1.23	1.24	1.23	.00	1.23	
12020.	9.72	1.50	1.21	1.22	.01	1.20	1.21	1.21	1.23	1.23	.00	1.23	
12052.	9.74	1.50	1.21	1.22	.00	1.20	1.22	1.23	1.23	1.23	.00	1.22	
		.86											
11618.	12.36	.41	1.58	1.57	.00	1.54	1.52	1.59	1.52	1.52	.00	1.53	END OF CHARGE
11644.	11.84	.45	1.49	1.50	.00	1.49	1.47	1.50	1.47	1.46	.00	1.47	
11682.	11.97	.53	1.52	1.52	.00	1.51	1.48	1.51	1.49	1.47	.00	1.48	
11730.	12.42	.49	1.57	1.55	.01	1.55	1.52	1.61	1.55	1.54	.00	1.54	
11756.	12.44	.51	1.57	1.54	.01	1.55	1.53	1.61	1.55	1.54	.00	1.54	
11794.	12.42	.53	1.56	1.54	.00	1.56	1.54	1.57	1.55	1.54	.00	1.53	
11842.	12.44	.56	1.57	1.54	.01	1.57	1.55	1.54	1.56	1.55	.00	1.54	
11874.	12.42	.57	1.57	1.54	.01	1.57	1.55	1.51	1.56	1.56	.00	1.55	
11906.	12.41	.60	1.57	1.55	.01	1.57	1.55	1.49	1.56	1.56	.00	1.55	
11954.	12.45	.59	1.57	1.55	.00	1.56	1.55	1.57	1.56	1.55	.00	1.54	
11986.	12.45	.57	1.57	1.55	.01	1.57	1.54	1.56	1.56	1.55	.00	1.55	
12020.	12.45	.61	1.57	1.55	.01	1.57	1.56	1.52	1.57	1.56	.00	1.55	
12052.	12.48	.60	1.56	1.55	.00	1.56	1.55	1.60	1.55	1.55	.00	1.54	

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PACK NO. 50  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.50	1	2	3	4	5	6	7	8	9	10	
11739.	11.59	2.50	1.09	1.20	1.15	1.11	.00	1.19	1.19	1.19	1.19	1.18	END OF DISCHARGE
11774.	11.61	2.49	1.10	1.20	1.16	1.11	.00	1.19	1.19	1.19	1.19	1.18	
11800.	11.57	2.49	1.09	1.19	1.15	1.11	.00	1.19	1.19	1.19	1.19	1.18	
11853.	11.52	2.50	1.08	1.19	1.15	1.10	.00	1.18	1.18	1.18	1.18	1.17	
11877.	11.53	2.51	1.08	1.19	1.15	1.10	.00	1.18	1.19	1.18	1.18	1.17	
11917.	11.52	2.51	1.07	1.18	1.15	1.10	.00	1.18	1.18	1.18	1.18	1.17	
11963.	11.50	2.50	1.07	1.18	1.15	1.09	.00	1.18	1.18	1.18	1.18	1.17	
11997.	11.51	2.49	1.07	1.18	1.15	1.09	.00	1.18	1.18	1.18	1.18	1.17	
12027.	11.49	2.49	1.07	1.18	1.15	1.10	.00	1.18	1.18	1.18	1.18	1.17	
12069.	10.45	2.49	1.10	1.20	1.16	1.12	.00	1.19	1.19	1.19	1.19	1.18	
		1.44											
11739.	15.55	.63	1.59	1.49	1.57	1.56	.00	1.55	1.48	1.57	1.49	1.65	END OF CHARGE
11774.	15.59	.65	1.57	1.51	1.56	1.55	.00	1.57	1.50	1.60	1.50	1.68	
11800.	15.57	.65	1.56	1.51	1.55	1.55	.00	1.56	1.50	1.59	1.50	1.68	
11853.	15.47	.63	1.55	1.50	1.54	1.54	.00	1.55	1.49	1.57	1.50	1.67	
11877.	15.49	.64	1.55	1.50	1.54	1.54	.00	1.55	1.49	1.57	1.49	1.67	
11917.	15.48	.64	1.54	1.49	1.55	1.53	.00	1.55	1.48	1.56	1.49	1.67	
11963.	15.49	.65	1.55	1.50	1.55	1.53	.00	1.56	1.48	1.56	1.49	1.67	
11997.	15.51	.66	1.55	1.50	1.55	1.53	.00	1.56	1.49	1.57	1.50	1.68	
12027.	15.50	.68	1.55	1.50	1.55	1.54	.00	1.57	1.49	1.57	1.50	1.68	
12069.	15.49	.80	1.56	1.52	1.55	1.55	.00	1.57	1.51	1.59	1.51	1.70	

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PACK NO. 1  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.50	CELL VOLTAGES										
			1	2	3	4	5	6	7	8	9	10	
11375.	6.75	2.48	.00	1.18	1.09	.00	.00	.00	1.15	1.13	1.11	1.10	END OF DISCHARGE
11423.	6.24	2.48	.00	1.17	.92	.00	.00	.00	1.13	1.11	1.03	.93	
11449.	6.10	2.47	.00	1.15	.88	.00	.00	.00	1.12	1.09	.98	.88	
11487.	6.30	2.49	.00	1.15	.94	.00	.00	.00	1.12	1.09	1.04	.96	
11535.	6.25	2.49	.00	1.15	.96	.00	.00	.00	1.12	1.09	1.06	.87	
11567.	6.21	2.48	.00	1.15	.90	.00	.00	.00	1.12	1.09	1.04	.93	
11599.	6.03	2.49	.00	1.15	.83	.00	.00	.00	1.11	1.08	1.00	.87	
11647.	5.99	2.48	.00	1.15	.80	.00	.00	.00	1.11	1.08	.97	.85	
11679.	6.82	2.48	.00	1.18	1.11	.00	.00	.00	1.14	1.13	1.12	1.15	
11713.	6.80	2.48	.00	1.18	1.11	.00	.00	.00	1.15	1.14	1.12	1.12	
11745.	6.06	2.46	.00	1.17	.80	.00	.00	.00	1.14	1.11	.99	.85	
		1.56											
11375.	8.96	.83	.00	1.46	1.46	.00	.00	.00	1.55	1.51	1.50	1.46	END OF CHARGE
11423.	9.03	.71	.00	1.46	1.46	.00	.00	.00	1.60	1.54	1.51	1.46	
11449.	8.89	.67	.00	1.45	1.46	.00	.00	.00	1.56	1.51	1.46	1.44	
11487.	8.89	.67	.00	1.44	1.46	.00	.00	.00	1.54	1.50	1.47	1.44	
11535.	8.91	.68	.00	1.45	1.46	.00	.00	.00	1.55	1.50	1.48	1.44	
11567.	8.94	.64	.00	1.45	1.46	.00	.00	.00	1.56	1.51	1.49	1.46	
11599.	8.90	.69	.00	1.44	1.46	.00	.00	.00	1.55	1.50	1.47	1.44	
11647.	9.03	.99	.00	1.46	1.47	.00	.00	.00	1.58	1.53	1.50	1.46	
11679.	9.07	.89	.00	1.48	1.49	.00	.00	.00	1.55	1.53	1.51	1.49	
11713.	8.97	.85	.00	1.47	1.48	.00	.00	.00	1.54	1.50	1.49	1.46	
11745.	8.73	.64	.00	1.44	1.44	.00	.00	.00	1.52	1.46	1.43	1.42	

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PACK NO. 53  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGES										
			1	2	3	4	5	6	7	8	9	10	
5761.	12.40	1.50	1.23	1.25	1.25	1.27	1.24	1.26	1.26	1.25	1.27	1.24	END OF DISCHARGE
5801.	12.37	1.51	1.22	1.23	1.24	1.25	1.24	1.24	1.24	1.23	1.24	1.24	
5832.	12.33	1.51	1.20	1.22	1.24	1.24	1.25	1.24	1.23	1.22	1.23	1.23	
5872.	12.29	1.50	1.20	1.22	1.24	1.24	1.24	1.23	1.23	1.22	1.23	1.23	
5910.	12.29	1.52	1.20	1.22	1.23	1.24	1.24	1.23	1.23	1.22	1.23	1.23	
5938.	12.25	1.53	1.20	1.22	1.23	1.24	1.24	1.23	1.23	1.22	1.22	1.22	
		.35											
5761.	15.79	.20	1.52	1.57	1.58	1.64	1.61	1.55	1.63	1.65	1.60	1.43	END OF CHARGE
5801.	15.51	.19	1.50	1.51	1.52	1.60	1.56	1.51	1.55	1.61	1.56	1.56	
5832.	15.75	.24	1.50	1.53	1.55	1.62	1.58	1.51	1.56	1.64	1.60	1.61	
5872.	15.66	.18	1.48	1.49	1.53	1.62	1.58	1.49	1.61	1.65	1.57	1.60	
5910.	15.38	.22	1.49	1.51	1.51	1.58	1.54	1.50	1.54	1.59	1.50	1.58	
5938.	15.71	.22	1.50	1.53	1.56	1.62	1.58	1.50	1.61	1.65	1.53	1.59	

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PACK NO. 54  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 2.50	CELL VOLTAGES										
			1	2	3	4	5	6	7	8	9	10	
5782.	11.65	2.49	1.19	1.17	.96	1.17	1.21	1.20	1.18	1.19	1.20	1.20	END OF DISCHARGE
5813.	11.59	2.51	1.18	1.16	.95	1.16	1.21	1.19	1.17	1.18	1.19	1.19	
5853.	11.53	2.51	1.17	1.15	.94	1.15	1.21	1.18	1.17	1.18	1.19	1.19	
5891.	11.53	2.49	1.18	1.16	.93	1.15	1.20	1.19	1.17	1.18	1.19	1.19	
5919.	11.49	2.52	1.17	1.15	.92	1.15	1.20	1.18	1.16	1.18	1.19	1.19	
		.58											
5782.	15.51	.37	1.51	1.50	1.55	1.52	1.54	1.57	1.61	1.65	1.52	1.52	END OF CHARGE
5813.	15.50	.43	1.52	1.51	1.58	1.53	1.55	1.56	1.59	1.60	1.52	1.51	
5853.	15.52	.43	1.51	1.51	1.57	1.52	1.55	1.56	1.62	1.61	1.52	1.51	
5891.	15.49	.42	1.52	1.52	1.59	1.53	1.54	1.56	1.60	1.59	1.52	1.51	
5919.	15.39	.36	1.51	1.51	1.56	1.52	1.54	1.55	1.58	1.59	1.51	1.51	

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PACK NO. 5  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 2.50	CELL VOLTAGES											
			1	2	3	4	5	6	7	8	9	10		
5605.	9.39	2.50	1.19	.00	.00	1.20	1.16	1.18	1.19	1.19	1.19	1.19	1.19	END OF DISCHARGE
5645.	9.42	2.50	1.18	.00	.00	1.19	1.18	1.18	1.18	1.18	1.18	1.17		
5676.	9.33	2.51	1.16	.00	.00	1.17	1.18	1.16	1.17	1.16	1.16	1.16		
5716.	9.31	2.50	1.16	.00	.00	1.17	1.17	1.22	1.17	1.16	1.16	1.16		
5754.	9.27	2.51	1.15	.00	.00	1.16	1.17	1.15	1.16	1.15	1.16	1.15		
		.62												
5605.	11.48	.63	1.43	.00	.00	1.43	1.44	1.43	1.43	1.43	1.43	1.42	1.42	END OF CHARGE
5645.	11.53	.61	1.44	.00	.00	1.44	1.44	1.44	1.43	1.43	1.43	1.43		
5676.	11.48	.62	1.43	.00	.00	1.43	1.45	1.43	1.42	1.42	1.43	1.42		
5716.	11.48	.62	1.43	.00	.00	1.43	1.45	1.44	1.42	1.42	1.43	1.42		
5754.	11.46	.60	1.42	.00	.00	1.43	1.44	1.43	1.42	1.42	1.42	1.42		

PACK NO. 29  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGES										
			1	2	3	4	5	6	7	8	9	10	
5519.	6.31	1.47	.00	1.17	1.15	1.06	.96	.89	.00	.00	.00	1.14	END OF DISCHARGE
5558.	6.08	1.47	.00	1.16	1.14	1.02	.83	.84	.00	.00	.00	1.13	
5581.	5.25	1.20	.00	1.17	1.16	1.07	.16	.90	.00	.00	.00	1.14	
5604.	5.77	1.50	.00	1.20	1.24	1.22	.00	.97	.00	.00	.00	1.17	
		.48											
5519.	8.41	.44	.00	1.42	1.39	1.40	1.40	1.41	.00	.00	.00	1.42	END OF CHARGE
5558.	8.39	.43	.00	1.42	1.40	1.40	1.40	1.41	.00	.00	.00	1.41	
5581.	8.42	.48	.00	1.42	1.41	1.41	1.40	1.42	.00	.00	.00	1.41	
5604.	7.08	.48	.00	1.41	1.44	1.42	.00	1.42	.00	.00	.00	1.41	

PACK NO. 62  
GULTON 6 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.00	CELL VOLTAGES									
			1	2	3	4	5	6	7	8	9	10

11308.	7.09	3.00	1.21	1.20	1.17	.00	.00	1.17	.00	1.19	1.19	.00
11343.	7.07	2.99	1.21	1.20	1.17	.00	.00	1.17	.00	1.19	1.19	.00
11372.	7.06	2.99	1.20	1.19	1.16	.00	.00	1.17	.00	1.20	1.20	.00
11422.	7.04	2.99	1.20	1.19	1.17	.00	.00	1.16	.00	1.18	1.18	.00
11446.	7.02	3.01	1.20	1.19	1.17	.00	.00	1.15	.00	1.17	1.18	.00
11486.	7.02	3.00	1.19	1.18	1.17	.00	.00	1.15	.00	1.17	1.18	.00
11532.	7.00	3.01	1.20	1.18	1.17	.00	.00	1.15	.00	1.17	1.17	.00
11566.	7.00	3.00	1.19	1.18	1.17	.00	.00	1.15	.00	1.17	1.18	.00
11596.	7.02	2.99	1.20	1.18	1.17	.00	.00	1.15	.00	1.17	1.18	.00
11646.	6.97	2.98	1.19	1.18	1.16	.00	.00	1.14	.00	1.16	1.16	.00
11676.	6.94	2.99	1.19	1.17	1.16	.00	.00	1.14	.00	1.16	1.16	.00
11710.	6.96	2.99	1.19	1.18	1.16	.00	.00	1.14	.00	1.16	1.16	.00
11742.	6.97	2.99	1.19	1.18	1.16	.00	.00	1.14	.00	1.17	1.17	.00

END OF  
DISCHARGE

		1.72										
11308.	9.35	.75	1.54	1.60	1.54	.00	.00	1.63	.00	1.54	1.51	.00
11343.	9.38	.71	1.54	1.62	1.55	.00	.00	1.65	.00	1.54	1.51	.00
11372.	9.37	.67	1.54	1.62	1.54	.00	.00	1.64	.00	1.54	1.50	.00
11422.	9.44	.68	1.54	1.65	1.56	.00	.00	1.66	.00	1.55	1.51	.00
11446.	9.45	.69	1.53	1.67	1.55	.00	.00	1.66	.00	1.54	1.51	.00
11486.	9.45	.68	1.53	1.66	1.57	.00	.00	1.66	.00	1.54	1.50	.00
11532.	9.45	.68	1.54	1.66	1.57	.00	.00	1.66	.00	1.54	1.50	.00
11566.	9.46	.68	1.53	1.66	1.57	.00	.00	1.66	.00	1.54	1.50	.00
11596.	9.30	.63	1.52	1.57	1.56	.00	.00	1.62	.00	1.53	1.50	.00
11646.	9.23	.64	1.54	1.57	1.56	.00	.00	1.58	.00	1.54	1.47	.00
11676.	9.21	.62	1.54	1.57	1.56	.00	.00	1.58	.00	1.54	1.47	.00
11710.	9.23	.64	1.54	1.58	1.56	.00	.00	1.58	.00	1.54	1.46	.00
11742.	9.32	.62	1.54	1.60	1.56	.00	.00	1.61	.00	1.54	1.48	.00

END OF  
CHARGE

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PACK NO. 65  
GULTON 6 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 1.80	1	2	3	4	5	6	7	8	9	10	
5737.	9.74	1.81	1.23	1.24	1.23	.00	1.24	.00	1.19	1.25	1.24	1.13	END OF DISCHARGE
5785.	9.88	1.81	1.24	1.25	1.25	.00	1.26	.00	1.21	1.23	1.25	1.18	
5823.	9.80	1.82	1.23	1.24	1.23	.00	1.25	.00	1.20	1.23	1.24	1.16	
5851.	9.80	1.82	1.24	1.25	1.24	.00	1.26	.00	1.20	1.21	1.24	1.16	
		.41											
5737.	12.29	.31	1.59	1.60	1.53	.00	1.39	.00	1.65	1.44	1.50	1.57	END OF CHARGE
5785.	12.32	.42	1.55	1.56	1.54	.00	1.53	.00	1.56	1.48	1.51	1.55	
5823.	12.29	.36	1.55	1.56	1.53	.00	1.51	.00	1.56	1.48	1.51	1.55	
5851.	12.64	.43	1.62	1.64	1.57	.00	1.57	.00	1.66	1.38	1.53	1.63	

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PACK NO. 110  
G.E. 12 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.60	CELL VOLTAGES				
			1	2	3	4	5

11449.	6.20	3.57	1.24	1.24	1.24	1.24	1.24
11475.	6.14	3.58	1.23	1.23	1.22	1.23	1.22
11512.	6.14	3.58	1.24	1.24	1.24	1.24	1.24
11538.	6.21	3.59	1.25	1.25	1.26	1.25	1.25
11576.	6.19	3.60	1.24	1.23	1.23	1.24	1.23
11624.	6.18	3.62	1.25	1.23	1.22	1.24	1.23
11656.	6.18	3.57	1.25	1.23	1.23	1.24	1.22
11688.	6.18	3.58	1.25	1.23	1.24	1.24	1.22
11736.	6.17	3.58	1.24	1.23	1.21	1.23	1.24
11768.	6.15	3.59	1.24	1.23	1.22	1.24	1.23
11802.	6.14	3.60	1.24	1.23	1.22	1.23	1.22
11834.	6.15	3.60	1.23	1.23	1.23	1.23	1.22

END OF  
DISCHARGE

06

		2.07					
11449.	7.84	1.49	1.61	1.59	1.53	1.56	1.53
11475.	7.77	1.75	1.59	1.64	1.48	1.61	1.45
11512.	7.36	2.07	1.47	1.51	1.46	1.50	1.45
11538.	7.80	1.17	1.56	1.63	1.54	1.61	1.49
11576.	7.77	1.36	1.56	1.62	1.48	1.60	1.50
11624.	7.78	1.40	1.61	1.62	1.45	1.60	1.47
11656.	7.78	1.39	1.61	1.62	1.48	1.60	1.46
11688.	7.78	1.44	1.60	1.62	1.50	1.60	1.46
11736.	7.76	1.51	1.60	1.60	1.46	1.63	1.54
11768.	7.76	1.49	1.58	1.62	1.45	1.60	1.49
11802.	7.74	1.55	1.59	1.62	1.46	1.60	1.46
11834.	7.74	1.61	1.56	1.62	1.46	1.60	1.48

END OF  
CHARGE

PACK NO. 124  
G.E. 12 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	1	2	3	4	5
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11242.	5.72	6.03	1.19	1.19	1.03	1.18	1.16
11279.	5.93	5.98	1.21	1.21	1.10	1.22	1.19
11305.	5.90	5.99	1.20	1.20	1.09	1.21	1.19
11343.	6.06	6.02	1.23	1.24	1.17	1.24	1.23
11391.	5.82	5.96	1.19	1.19	1.09	1.20	1.18
11423.	5.81	6.05	1.19	1.19	1.09	1.20	1.19
11455.	5.80	6.05	1.19	1.19	1.08	1.20	1.18
11503.	5.79	6.02	1.19	1.20	1.07	1.19	1.18
11535.	5.79	5.95	1.19	1.20	1.08	1.20	1.18
11569.	5.81	5.96	1.19	1.20	1.08	1.19	1.19
11601.	5.81	5.93	1.19	1.20	1.08	1.19	1.19

END OF  
DISCHARGE

3.45

11242.	7.72	1.21	1.57	1.51	1.60	1.48	1.57
11279.	7.93	1.51	1.61	1.55	1.62	1.53	1.61
11305.	7.90	1.40	1.60	1.54	1.64	1.53	1.58
11343.	7.80	1.27	1.58	1.53	1.63	1.51	1.59
11391.	7.82	1.22	1.58	1.52	1.64	1.50	1.60
11423.	7.82	1.25	1.58	1.52	1.64	1.50	1.60
11455.	7.82	1.25	1.57	1.52	1.65	1.50	1.61
11503.	7.82	1.27	1.57	1.52	1.64	1.50	1.61
11535.	7.83	1.22	1.57	1.52	1.66	1.50	1.61
11569.	7.84	1.20	1.57	1.52	1.65	1.49	1.61
11601.	7.84	1.24	1.56	1.52	1.65	1.50	1.61

END OF  
CHARGE

PACK NO. 111  
G.E. 12 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 3.60	1	2	3	4	5
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5746.	6.16	3.59	1.23	1.23	1.23	1.23	1.23
5761.	6.25	3.58	1.26	1.26	1.26	1.27	1.25
5792.	6.20	3.60	1.25	1.25	1.25	1.25	1.25
5832.	6.18	3.62	1.24	1.25	1.25	1.25	1.25
5870.	6.18	3.60	1.24	1.24	1.24	1.24	1.24
5898.	6.18	3.61	1.24	1.24	1.24	1.24	1.23

END OF  
DISCHARGE

		.83					
5746.	7.77	.34	1.60	1.53	1.53	1.49	1.57
5761.	7.67	.77	1.52	1.56	1.56	1.54	1.52
5792.	7.83	.57	1.59	1.57	1.57	1.54	1.59
5832.	7.84	.54	1.61	1.56	1.57	1.53	1.60
5870.	7.87	.54	1.61	1.56	1.56	1.53	1.59
5898.	7.85	.51	1.61	1.56	1.56	1.52	1.59

END OF  
CHARGE

26

PACK NO. 125  
G.E. 12 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C.  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	1	2	3	4	5
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5739.	5.93	5.95	1.20	1.20	1.19	1.20	1.19
5754.	6.09	6.00	1.22	1.22	1.22	1.22	1.22
5785.	6.02	6.07	1.20	1.21	1.20	1.21	1.20
5825.	6.00	6.01	1.20	1.20	1.20	1.20	1.20
5863.	5.99	5.96	1.20	1.21	1.21	1.21	1.21
5891.	5.98	6.00	1.20	1.21	1.21	1.21	1.21

END OF  
DISCHARGE

		1.38					
5739.	7.66	.26	1.59	1.57	1.58	1.50	1.47
5754.	7.84	1.21	1.56	1.56	1.57	1.55	1.59
5785.	7.90	.99	1.60	1.59	1.60	1.54	1.56
5825.	7.93	.89	1.62	1.60	1.61	1.54	1.55
5863.	7.91	.91	1.62	1.61	1.63	1.55	1.55
5891.	7.80	.80	1.60	1.58	1.60	1.52	1.54

END OF  
CHARGE

93



PACK NO. 83  
G.E. 12 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	1	2	3	4	5
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5767.	5.74	6.10	1.15	1.15	1.15	1.15	1.13
5798.	5.69	6.03	1.14	1.14	1.14	1.14	1.12
5838.	5.67	6.03	1.13	1.14	1.14	1.14	1.12
5876.	5.68	6.00	1.14	1.15	1.15	1.15	1.13
5904.	5.67	6.02	1.13	1.15	1.15	1.15	1.13

END OF  
DISCHARGE

		1.50					
5767.	7.23	1.52	1.45	1.43	1.45	1.44	1.43
5798.	7.16	1.50	1.44	1.43	1.44	1.43	1.42
5838.	7.16	1.50	1.44	1.43	1.44	1.43	1.42
5876.	7.19	1.50	1.45	1.44	1.46	1.45	1.43
5904.	7.21	1.51	1.45	1.44	1.46	1.45	1.44

END OF  
CHARGE

fb

PACK NO. 86  
G.E. 12 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 3.60	1	2	3	4	5
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5556.	5.69	3.57	1.16	1.14	1.13	1.14	1.13
5595.	5.68	3.54	1.16	1.14	1.14	1.15	1.14
5626.	5.65	3.57	1.15	1.13	1.13	1.14	1.14
5681.	5.67	3.57	1.15	1.13	1.13	1.14	1.12
5709.	5.66	3.57	1.15	1.12	1.13	1.14	1.12

END OF  
DISCHARGE

		1.15					
5556.	7.10	1.16	1.42	1.42	1.43	1.42	1.42
5595.	7.11	1.15	1.42	1.42	1.43	1.43	1.42
5626.	7.09	1.16	1.42	1.42	1.43	1.42	1.42
5681.	7.09	1.15	1.42	1.41	1.42	1.42	1.41
5709.	7.10	1.15	1.42	1.41	1.42	1.42	1.41

END OF  
CHARGE

95

PACK NO. 84  
GOULD 20 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	1	2	3	4	5
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11348.	6.15	5.97	1.25	1.26	1.22	1.23	1.24
11383.	6.17	5.94	1.26	1.26	1.23	1.24	1.23
11412.	6.16	5.95	1.25	1.25	1.22	1.24	1.23
11462.	6.20	5.82	1.26	1.25	1.24	1.25	1.23
11486.	6.14	5.96	1.25	1.25	1.23	1.24	1.22
11526.	6.15	5.94	1.25	1.25	1.24	1.24	1.23
11572.	6.13	5.93	1.24	1.24	1.24	1.24	1.21
11606.	6.09	5.98	1.24	1.23	1.22	1.23	1.19
11636.	6.12	5.95	1.25	1.24	1.22	1.24	1.20
11686.	6.07	5.96	1.24	1.24	1.23	1.23	1.19
11750.	6.03	5.98	1.23	1.22	1.21	1.22	1.16
11782.	6.02	6.00	1.23	1.22	1.21	1.22	1.15

END OF  
DISCHARGE

96

		3.45					
11348.	7.81	1.91	1.61	1.61	1.54	1.55	1.52
11383.	7.81	2.31	1.58	1.61	1.58	1.56	1.50
11412.	7.78	2.34	1.57	1.59	1.57	1.56	1.52
11462.	7.80	2.43	1.57	1.58	1.58	1.56	1.52
11486.	7.76	2.51	1.56	1.58	1.58	1.56	1.50
11526.	7.76	2.49	1.56	1.58	1.58	1.56	1.52
11572.	7.76	2.59	1.56	1.58	1.59	1.57	1.48
11606.	7.76	2.65	1.56	1.58	1.57	1.56	1.47
11636.	7.72	2.43	1.55	1.56	1.56	1.56	1.47
11686.	7.67	2.48	1.54	1.58	1.56	1.55	1.46
11750.	7.62	2.31	1.50	1.54	1.52	1.51	1.41
11782.	7.64	2.39	1.53	1.56	1.54	1.54	1.45

END OF  
CHARGE

PACK NO. 80  
GOULD 20 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	1	2	3	4	5
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5691.	6.14	5.99	1.26	1.23	1.19	1.26	1.25
5731.	6.11	6.01	1.25	1.23	1.19	1.25	1.25
5762.	6.10	6.04	1.24	1.22	1.19	1.25	1.25
5802.	6.10	6.02	1.24	1.22	1.19	1.25	1.24
5840.	6.09	6.04	1.24	1.22	1.18	1.25	1.24
5868.	6.11	6.02	1.24	1.22	1.19	1.25	1.25

END OF  
DISCHARGE

		1.38					
5691.	7.75	1.18	1.54	1.57	1.56	1.54	1.53
5731.	7.71	1.18	1.54	1.57	1.55	1.54	1.54
5762.	7.71	1.21	1.53	1.57	1.56	1.54	1.54
5802.	7.71	1.20	1.53	1.57	1.56	1.54	1.55
5840.	7.77	1.33	1.50	1.59	1.57	1.55	1.54
5868.	7.78	1.33	1.53	1.60	1.57	1.56	1.56

END OF  
CHARGE

94

PACK NO. 94  
GOULD 20 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 10.00	1	2	3	4	5
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5573.	5.57	9.87	1.23	1.22	1.17	1.22	1.18
5613.	5.86	10.02	1.20	1.20	1.16	1.18	1.16
5644.	5.94	9.94	1.22	1.19	1.15	1.20	1.20
5684.	5.92	9.96	1.21	1.19	1.15	1.20	1.20
5700.	6.05	10.22	1.23	1.21	1.18	1.22	1.22
5728.	5.97	10.17	1.22	1.20	1.16	1.21	1.20

END OF  
DISCHARGE

		2.30					
5573.	7.66	1.01	1.52	1.52	1.59	1.56	1.50
5613.	7.88	1.46	1.52	1.51	1.67	1.64	1.54
5644.	7.83	1.38	1.53	1.53	1.58	1.60	1.58
5684.	7.80	1.28	1.52	1.52	1.59	1.60	1.55
5700.	7.94	1.47	1.54	1.53	1.63	1.60	1.62
5728.	7.90	1.37	1.53	1.52	1.63	1.62	1.57

END OF  
CHARGE

86

PACK NO. 105  
GOULD 20 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 10.00	CELL VOLTAGES				
			1	2	3	4	5
5494.	4.07	9.10	.00	1.16	.89	.92	1.15
5533.	3.98	9.29	.00	1.15	.85	.89	1.14
5581.	3.36	9.89	.00	1.16	.07	1.10	1.18
		2.50					
5494.	5.76	2.30	.00	1.49	1.43	1.43	1.44
5533.	5.78	2.18	.00	1.49	1.44	1.44	1.44
5581.	5.69	2.43	.00	1.48	1.38	1.41	1.44

END OF  
DISCHARGE

END OF  
CHARGE

66

PACK NO. 102  
GULTON 20 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	1	2	3	4	5
5519.	4.88	5.99	1.22	.00	1.21	1.25	1.22
5559.	4.78	6.04	1.21	.00	1.20	1.22	1.19
5590.	4.79	6.09	1.20	.00	1.20	1.23	1.21
5630.	4.79	6.05	1.20	.00	1.20	1.22	1.20
5668.	4.77	6.10	1.20	.00	1.19	1.22	1.19
5696.	4.85	6.04	1.21	.00	1.21	1.24	1.22
		1.38					
5519.	6.25	1.08	1.54	.00	1.54	1.50	1.52
5559.	6.05	1.16	1.57	.00	1.56	1.46	1.47
5590.	6.03	.91	1.50	.00	1.54	1.48	1.50
5630.	5.94	.75	1.52	.00	1.52	1.46	1.48
5668.	6.12	1.32	1.58	.00	1.57	1.49	1.50
5696.	6.17	1.18	1.56	.00	1.57	1.52	1.54

END OF  
DISCHARGE

END OF  
CHARGE

100

PACK NO. 116  
GULTON 20 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 10.00	1	2	3	4	5
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5361.	5.74	9.90	1.17	1.19	1.11	1.20	1.14
5401.	5.74	9.91	1.16	1.17	1.10	1.19	1.15
5432.	5.73	9.93	1.16	1.16	1.09	1.18	1.14
5472.	5.72	9.84	1.14	1.17	1.09	1.18	1.14
5488.	5.90	10.01	1.21	1.19	1.12	1.21	1.18
5516.	5.78	9.90	1.14	1.18	1.10	1.20	1.16

END OF  
DISCHARGE

		2.30					
5361.	7.69	1.13	1.47	1.61	1.55	1.59	1.53
5401.	7.68	1.21	1.46	1.58	1.55	1.57	1.53
5432.	7.72	1.26	1.46	1.59	1.54	1.59	1.53
5472.	7.69	1.25	1.45	1.59	1.54	1.58	1.53
5488.	7.70	1.86	1.45	1.59	1.55	1.57	1.54
5516.	7.69	1.49	1.41	1.60	1.55	1.58	1.53

END OF  
CHARGE

101



PACK NO. 77  
GULTON 20 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	1	2	3	4	5
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5538.	5.92	1.89	1.35	.00	1.43	1.40	1.36
5578.	4.54	5.63	1.14	.00	1.17	1.16	1.14
5616.	4.57	5.59	1.14	.00	1.16	1.17	1.13
5644.	4.51	5.58	1.14	.00	1.16	1.17	1.12

END OF  
DISCHARGE

		1.92					
5538.	5.76	1.88	1.40	.00	1.50	1.48	1.40
5578.	5.79	1.89	1.45	.00	1.47	1.46	1.42
5616.	5.91	1.89	1.47	.00	1.47	1.48	1.42
5644.	5.84	1.92	1.47	.00	1.48	1.48	1.42

END OF  
CHARGE

201

PACK NO. 103  
G.E. 5 A.H. NIMBUS

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 110

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	1	2	3	4	5
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4343.	6.20	1.50	1.25	1.25	1.25	1.24	1.26
4378.	6.17	1.49	1.25	1.25	1.25	1.23	1.25
4407.	6.16	1.50	1.24	1.25	1.24	1.23	1.25
4457.	6.14	1.50	1.24	1.24	1.25	1.22	1.25
4481.	6.14	1.51	1.23	1.24	1.24	1.22	1.25
4521.	6.14	1.51	1.23	1.24	1.25	1.22	1.25
4567.	6.14	1.50	1.23	1.24	1.25	1.22	1.25
4632.	6.20	1.51	1.24	1.25	1.25	1.25	1.26
4662.	6.19	1.51	1.24	1.25	1.26	1.24	1.25
4696.	6.19	1.52	1.24	1.24	1.25	1.24	1.25
4728.	6.17	1.52	1.23	1.24	1.24	1.24	1.24

END OF  
DISCHARGE

103

		.83					
4343.	7.47	.45	1.51	1.51	1.53	1.45	1.50
4378.	7.47	.49	1.51	1.51	1.54	1.44	1.50
4407.	7.45	.48	1.51	1.51	1.53	1.44	1.50
4457.	7.43	.49	1.51	1.50	1.54	1.42	1.50
4481.	7.43	.49	1.50	1.50	1.54	1.42	1.50
4521.	7.43	.40	1.50	1.50	1.54	1.42	1.51
4567.	7.42	.48	1.50	1.50	1.54	1.42	1.50
4632.	7.62	.55	1.53	1.53	1.58	1.49	1.52
4662.	7.61	.52	1.54	1.53	1.59	1.47	1.52
4696.	7.45	.43	1.48	1.47	1.52	1.41	1.47
4728.	7.43	.45	1.50	1.50	1.54	1.44	1.49

END OF  
CHARGE

PACK NO. 107  
G.E. 5 A.H. NIMBUS

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 110

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN

CYCLE PACK CURRENT  
NO. VOLTAGES 2.50 1 2 3 4 5 PSIA

3697.	5.98	2.47	1.21	1.21	1.20	1.20	1.21	11.561
3734.	5.99	2.43	1.21	1.21	1.20	1.20	1.21	11.580
3812.	5.94	2.53	1.20	1.20	1.20	1.18	1.20	10.220
3841.	5.94	2.53	1.19	1.20	1.21	1.19	1.21	10.277
3876.	5.91	2.51	1.19	1.19	1.20	1.18	1.20	9.954
3921.	5.99	2.44	1.20	1.20	1.22	1.20	1.22	9.887
3936.	6.20	2.49	1.24	1.25	1.25	1.25	1.26	96.029
3987.	6.09	2.46	1.22	1.23	1.23	1.23	1.23	96.029
4024.	6.07	2.45	1.22	1.23	1.22	1.22	1.23	96.029
4049.	6.01	2.47	1.20	1.21	1.21	1.21	1.22	85.777
4081.	5.99	2.47	1.20	1.21	1.20	1.20	1.21	80.157

END OF  
DISCHARGE

101

		1.38						
3697.	7.45	.68	1.53	1.50	1.47	1.48	1.51	12.293
3734.	7.45	.69	1.53	1.50	1.48	1.48	1.51	12.037
3812.	7.49	.83	1.54	1.50	1.49	1.46	1.54	10.534
3841.	7.45	.83	1.52	1.50	1.50	1.46	1.53	10.410
3876.	7.34	.75	1.50	1.47	1.48	1.44	1.50	10.182
3921.	7.41	.66	1.51	1.49	1.49	1.45	1.52	10.277
3936.	7.83	1.35	1.56	1.58	1.59	1.57	1.57	96.029
3987.	8.09	1.37	1.64	1.62	1.62	1.63	1.64	96.029
4024.	8.05	1.37	1.63	1.62	1.61	1.62	1.63	96.029
4049.	7.44	.69	1.50	1.50	1.49	1.48	1.52	87.023
4081.	7.42	.69	1.50	1.50	1.48	1.47	1.51	81.241

END OF  
CHARGE

PACK NO. 106  
G.E. 5 A.H. NIMBUS

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 120

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	1	2	3	4	5
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4315.	6.09	1.46	1.22	1.23	1.22	1.23	1.23
4352.	6.11	1.45	1.23	1.24	1.23	1.23	1.23
4379.	6.09	1.45	1.22	1.23	1.22	1.23	1.23
4430.	6.11	1.47	1.22	1.23	1.24	1.24	1.23
4459.	6.09	1.47	1.21	1.22	1.22	1.23	1.22
4494.	6.02	1.37	1.11	1.12	1.11	1.12	1.12
4574.	6.06	1.49	1.21	1.22	1.23	1.22	1.23
4603.	6.07	1.48	1.21	1.22	1.23	1.22	1.23
4654.	6.06	1.48	1.21	1.23	1.23	1.22	1.23
4683.	6.08	1.46	1.21	1.23	1.23	1.23	1.23
4716.	6.08	1.46	1.21	1.23	1.23	1.23	1.23
4748.	6.06	1.47	1.21	1.23	1.22	1.22	1.23

END OF  
DISCHARGE

		.90					
4315.	7.11	.92	1.44	1.43	1.41	1.43	1.42
4352.	7.14	.92	1.44	1.44	1.42	1.43	1.43
4379.	7.12	.92	1.44	1.44	1.41	1.43	1.43
4430.	7.15	.90	1.44	1.44	1.43	1.44	1.44
4459.	7.17	.89	1.44	1.43	1.42	1.43	1.43
4494.	7.12	.90	1.43	1.44	1.42	1.43	1.44
4574.	7.20	.90	1.43	1.43	1.42	1.43	1.43
4603.	7.13	.91	1.43	1.43	1.43	1.43	1.44
4654.	7.12	.90	1.43	1.44	1.43	1.44	1.43
4683.	7.17	.89	1.44	1.44	1.44	1.44	1.44
4716.	7.07	.59	1.42	1.43	1.41	1.42	1.42
4748.	7.12	.90	1.43	1.44	1.42	1.43	1.43

END OF  
CHARGE

105

PACK NO. 304  
G.E. 5 A.H. NIMBUS

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 120

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN

CYCLE PACK CURRENT  
NO. VOLTAGES 2.50 1 2 3 4 5 PSIA

3618.	5.47	2.50	1.14	1.13	1.13	.97	1.14	11.070
3655.	5.61	2.52	1.15	1.15	1.14	1.07	1.14	11.461
3733.	5.55	2.47	1.16	1.15	1.15	.99	1.16	11.472
3762.	5.60	2.46	1.15	1.15	1.16	1.03	1.16	11.314
3797.	5.51	2.47	1.14	1.13	1.15	.98	1.15	11.060
3842.	5.52	2.47	1.15	1.14	1.15	.97	1.16	11.092
3877.	5.62	2.45	1.14	1.13	1.15	1.11	1.15	10.077
3906.	5.54	2.45	1.14	1.13	1.15	1.01	1.15	10.965
3957.	5.57	2.45	1.14	1.14	1.15	1.03	1.15	11.874
3994.	5.39	2.43	1.13	1.13	1.14	.88	1.14	11.821
4019.	5.83	2.46	1.18	1.18	1.19	1.14	1.19	11.631
4051.	5.41	2.44	1.14	1.14	1.14	.90	1.13	11.535

END OF  
DISCHARGE

		1.50						
3618.	7.24	1.54	1.46	1.46	1.47	1.42	1.46	11.683
3655.	7.32	1.52	1.48	1.47	1.50	1.44	1.48	12.149
3733.	7.28	1.53	1.47	1.47	1.48	1.43	1.47	12.053
3762.	7.31	1.53	1.47	1.47	1.50	1.44	1.48	11.937
3797.	7.28	1.51	1.46	1.46	1.50	1.43	1.47	11.588
3842.	7.29	1.51	1.46	1.46	1.50	1.43	1.48	11.747
3877.	7.28	1.50	1.46	1.46	1.50	1.44	1.47	13.660
3906.	7.26	1.50	1.46	1.46	1.49	1.43	1.47	12.085
3957.	7.31	1.50	1.47	1.47	1.51	1.44	1.48	12.719
3994.	7.30	1.50	1.47	1.47	1.50	1.44	1.47	12.349
4019.	7.29	1.50	1.46	1.47	1.50	1.43	1.47	12.085
4051.	7.28	1.50	1.46	1.47	1.49	1.44	1.47	12.085

END OF  
CHARGE

901

PACK NO. 113  
G.E. 5 A.H. NIMBUS

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 130

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	1	2	3	4	5
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4317.	5.80	1.56	1.16	1.18	1.17	1.17	1.13
4354.	5.87	1.49	1.18	1.20	1.19	1.19	1.17
4381.	5.89	1.49	1.18	1.20	1.18	1.19	1.16
4432.	5.92	1.47	1.19	1.20	1.19	1.19	1.17
4461.	5.91	1.47	1.19	1.20	1.20	1.19	1.18
4496.	5.85	1.47	1.18	1.20	1.18	1.19	1.16
4541.	5.88	1.46	1.18	1.20	1.19	1.19	1.17
4576.	5.85	1.47	1.18	1.20	1.19	1.19	1.16
4605.	5.87	1.47	1.18	1.20	1.19	1.19	1.17
4656.	5.85	1.47	1.18	1.19	1.16	1.18	1.14
4685.	5.89	1.46	1.18	1.19	1.17	1.18	1.17
4718.	5.83	1.49	1.17	1.19	1.15	1.18	1.14
4750.	5.81	1.49	1.17	1.19	1.15	1.18	1.13

END OF  
DISCHARGE

		.98					
4317.	7.11	.95	1.42	1.43	1.42	1.42	1.41
4354.	7.11	.97	1.43	1.44	1.42	1.43	1.42
4381.	7.11	.94	1.42	1.43	1.42	1.42	1.41
4432.	7.12	1.00	1.43	1.43	1.42	1.43	1.41
4461.	7.10	1.00	1.43	1.43	1.43	1.43	1.42
4496.	7.09	.99	1.43	1.43	1.42	1.43	1.42
4541.	7.09	.99	1.43	1.43	1.42	1.43	1.41
4576.	7.09	.99	1.43	1.43	1.43	1.42	1.41
4605.	7.09	.99	1.42	1.43	1.43	1.43	1.42
4656.	7.12	.99	1.43	1.43	1.42	1.42	1.41
4685.	7.12	.99	1.43	1.42	1.42	1.42	1.42
4718.	7.10	.99	1.42	1.42	1.41	1.42	1.40
4750.	7.12	.99	1.43	1.43	1.41	1.42	1.41

END OF  
CHARGE

107

PACK NO. 114  
G.E. 5 A.H. NIMBUS

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 130

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN

CYCLE PACK CURRENT  
NO. VOLTAGES 2.50 1 2 3 4 5 PSIA

3587.	5.59	2.45	1.13	1.15	1.09	1.13	1.12	32.103
3624.	5.56	2.43	1.11	1.15	1.10	1.12	1.12	32.509
3702.	5.45	2.46	1.09	1.13	1.09	1.11	1.07	32.627
3731.	5.42	2.45	1.07	1.13	1.11	1.12	1.04	33.066
3766.	5.42	2.46	1.08	1.13	1.09	1.12	1.04	33.355
3811.	5.40	2.46	1.07	1.13	1.09	1.11	1.05	33.505
3846.	5.44	2.46	1.08	1.13	1.08	1.11	1.09	33.729
3875.	5.40	2.47	1.09	1.13	1.08	1.11	1.03	33.826
3963.	5.34	2.44	1.06	1.14	1.09	1.12	.98	34.232
3988.	5.51	2.45	1.09	1.14	1.10	1.12	1.12	34.692
4020.	5.45	2.46	1.06	1.13	1.08	1.11	1.10	34.928

END OF  
DISCHARGE

		1.63						
3587.	7.23	1.67	1.46	1.48	1.44	1.45	1.45	37.966
3624.	7.22	1.67	1.45	1.48	1.44	1.44	1.45	37.624
3702.	7.21	1.65	1.45	1.47	1.44	1.44	1.45	37.292
3731.	7.20	1.64	1.44	1.47	1.45	1.44	1.45	38.223
3766.	7.21	1.65	1.44	1.47	1.45	1.44	1.45	38.223
3811.	7.21	1.65	1.44	1.47	1.45	1.44	1.45	38.437
3846.	7.21	1.65	1.44	1.47	1.45	1.44	1.45	38.394
3875.	7.21	1.65	1.45	1.47	1.44	1.44	1.45	38.683
3963.	7.21	1.64	1.44	1.48	1.45	1.45	1.45	39.036
3988.	7.23	1.65	1.45	1.48	1.45	1.44	1.46	39.272
4020.	7.23	1.65	1.45	1.48	1.45	1.45	1.45	39.475

END OF  
CHARGE

801

PACK NO. 117  
GULTON 5 A.H. NIMBUS

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 110

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	1	2	3	4	5
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4137.	6.17	1.48	1.24	1.23	1.23	1.24	1.23
4172.	6.12	1.49	1.24	1.22	1.23	1.23	1.22
4201.	6.11	1.47	1.23	1.22	1.22	1.23	1.22
4251.	6.08	1.48	1.23	1.22	1.22	1.22	1.22
4275.	6.09	1.48	1.23	1.22	1.21	1.22	1.21
4315.	6.08	1.48	1.23	1.21	1.21	1.22	1.21
4361.	6.07	1.50	1.22	1.21	1.21	1.22	1.21
4395.	6.08	1.50	1.22	1.22	1.23	1.22	1.23
4425.	6.09	1.50	1.23	1.22	1.23	1.22	1.22
4475.	6.07	1.50	1.22	1.21	1.21	1.22	1.21
4505.	6.06	1.49	1.23	1.21	1.21	1.22	1.21

END OF  
DISCHARGE

		.83					
4137.	7.50	.49	1.50	1.49	1.54	1.49	1.48
4172.	7.48	.54	1.50	1.48	1.53	1.48	1.48
4201.	7.48	.53	1.50	1.48	1.53	1.48	1.47
4251.	7.39	.48	1.49	1.47	1.52	1.46	1.46
4275.	7.40	.49	1.48	1.47	1.51	1.47	1.46
4315.	7.39	.49	1.48	1.46	1.51	1.46	1.46
4361.	7.38	.48	1.48	1.46	1.50	1.46	1.46
4395.	7.39	.50	1.49	1.47	1.52	1.47	1.48
4425.	7.39	.50	1.49	1.47	1.52	1.47	1.47
4475.	7.39	.51	1.48	1.47	1.51	1.46	1.46
4505.	7.39	.49	1.48	1.47	1.51	1.46	1.46

END OF  
CHARGE

101



PACK NO. 121  
GULTON 5 A.H. NIMBUS

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 110

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN

CYCLE PACK CURRENT  
NO. VOLTAGES 2.50 1 2 3 4 5 PSIA

3699.	5.91	2.48	1.20	1.19	1.17	1.20	1.19	12.549
3736.	5.89	2.48	1.18	1.19	1.18	1.19	1.19	12.584
3814.	5.88	2.48	1.15	1.19	1.19	1.20	1.19	12.666
3843.	5.86	2.48	1.14	1.19	1.19	1.19	1.20	12.748
3878.	5.86	2.48	1.14	1.18	1.19	1.19	1.20	12.795
3923.	5.85	2.48	1.16	1.18	1.19	1.19	1.19	12.713
3958.	5.87	2.48	1.16	1.18	1.18	1.19	1.20	12.818
3987.	5.87	2.48	1.16	1.18	1.18	1.19	1.19	12.666
4038.	5.86	2.49	1.15	1.18	1.19	1.19	1.19	12.771
4083.	6.04	2.50	1.22	1.22	1.21	1.22	1.22	14.083

END OF  
DISCHARGE

110

		1.38						
3699.	7.51	.86	1.47	1.53	1.52	1.51	1.52	13.521
3736.	7.50	.88	1.47	1.52	1.53	1.51	1.53	13.568
3814.	7.48	.83	1.46	1.52	1.53	1.50	1.53	13.509
3843.	7.48	.84	1.45	1.52	1.54	1.50	1.53	13.720
3878.	7.48	.87	1.45	1.52	1.54	1.50	1.53	13.755
3923.	7.48	.84	1.46	1.51	1.54	1.50	1.53	13.509
3958.	7.49	.84	1.46	1.52	1.53	1.50	1.53	13.521
3987.	7.48	.85	1.46	1.51	1.53	1.50	1.52	13.462
4038.	7.50	.85	1.46	1.52	1.54	1.51	1.52	13.497
4083.	7.87	1.38	1.59	1.58	1.59	1.55	1.59	17.807

END OF  
CHARGE

PACK NO. 120  
GULTON 5 A.H. NIMBUS

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 120

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	1	2	3	4	5
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4239.	5.63	1.50	1.24	.74	1.22	1.23	1.21
4276.	5.63	1.48	1.24	.73	1.23	1.24	1.22
4303.	5.58	1.48	1.24	.68	1.23	1.24	1.21
4354.	5.75	1.50	1.25	.85	1.23	1.24	1.22
4383.	5.60	1.50	1.24	.71	1.24	1.24	1.22
4418.	5.74	1.37	1.13	.83	1.11	1.12	1.10
4463.	5.80	1.46	1.24	.92	1.22	1.23	1.21
4498.	5.80	1.48	1.23	.93	1.22	1.23	1.21
4527.	5.81	1.47	1.23	.94	1.22	1.23	1.21
4578.	5.82	1.47	1.23	.94	1.22	1.23	1.21
4607.	5.85	1.46	1.24	.95	1.23	1.24	1.22
4640.	5.81	1.50	1.23	.93	1.22	1.23	1.21
4672.	5.79	1.51	1.23	.92	1.22	1.23	1.21

END OF  
DISCHARGE

		.90					
4239.	7.24	.94	1.43	1.49	1.43	1.44	1.44
4276.	7.41	.93	1.44	1.65	1.44	1.44	1.44
4303.	7.39	.93	1.43	1.64	1.44	1.44	1.44
4354.	7.47	.91	1.44	1.69	1.44	1.45	1.45
4383.	7.41	.91	1.44	1.65	1.45	1.45	1.44
4418.	7.37	.92	1.44	1.62	1.43	1.44	1.44
4463.	7.39	.91	1.44	1.62	1.44	1.45	1.44
4498.	7.36	.92	1.43	1.61	1.43	1.44	1.44
4527.	7.36	.92	1.43	1.61	1.43	1.44	1.44
4578.	7.36	.91	1.44	1.63	1.46	1.45	1.44
4607.	7.41	.91	1.44	1.62	1.44	1.45	1.45
4640.	7.38	.92	1.44	1.61	1.43	1.44	1.44
4672.	7.36	.92	1.43	1.61	1.43	1.44	1.44

END OF  
CHARGE

PACK NO. 318  
GULTON 5 A.H. NIMBUS

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 120

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN

CYCLE NO.	PACK VOLTAGES	CURRENT 2.50	1	2	3	4	5	CELL VOLTAGES	PSIA
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3618.	5.25	2.46	1.07	1.03	1.17	.95	1.08	11.329	
3655.	5.33	2.45	1.08	1.05	1.17	.96	1.10	11.446	
3733.	5.44	2.48	1.11	1.10	1.17	1.00	1.11	11.714	
3762.	5.46	2.46	1.11	1.11	1.18	1.00	1.11	11.574	
3797.	5.36	2.47	1.09	1.07	1.18	.95	1.11	11.819	
3842.	5.47	2.46	1.12	1.08	1.17	1.00	1.12	11.866	
3877.	5.27	2.46	1.07	1.02	1.17	.94	1.10	11.959	
3906.	5.33	2.47	1.07	1.05	1.17	.98	1.10	12.088	
3957.	5.39	2.45	1.07	1.07	1.17	1.00	1.11	12.111	
3994.	5.41	2.45	1.07	1.10	1.17	1.03	1.09	11.948	
4019.	5.47	2.46	1.10	1.11	1.17	1.03	1.11	12.158	

END OF  
DISCHARGE

		1.50							
3618.	7.31	1.53	1.48	1.47	1.46	1.50	1.46	22.217	
3655.	7.34	1.52	1.48	1.47	1.47	1.50	1.47	22.381	
3733.	7.33	1.51	1.48	1.47	1.47	1.50	1.47	22.848	
3762.	7.36	1.50	1.48	1.47	1.49	1.50	1.48	21.786	
3797.	7.33	1.51	1.47	1.46	1.48	1.50	1.47	21.517	
3842.	7.33	1.51	1.47	1.46	1.48	1.50	1.48	22.906	
3877.	7.32	1.51	1.47	1.46	1.47	1.50	1.47	22.311	
3906.	7.31	1.51	1.46	1.46	1.46	1.49	1.47	22.953	
3957.	7.35	1.51	1.47	1.47	1.48	1.50	1.47	22.346	
3994.	7.35	1.50	1.48	1.00	1.48	1.50	1.47	21.190	
4019.	7.34	1.51	1.48	1.47	1.48	1.50	1.47	22.626	

END OF  
CHARGE

211

PACK NO. 127  
GULTON 5 A.H. NIMBUS

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 130

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGES				
			1	2	3	4	5

4286.	5.72	1.47	1.15	1.14	1.15	1.18	1.15
4323.	5.81	1.45	1.16	1.15	1.17	1.18	1.16
4350.	5.79	1.45	1.16	1.16	1.17	1.19	1.16
4401.	5.78	1.47	1.16	1.15	1.17	1.19	1.16
4430.	5.77	1.47	1.16	1.14	1.16	1.18	1.15
4465.	5.73	1.48	1.15	1.13	1.15	1.17	1.15
4510.	5.75	1.47	1.15	1.14	1.16	1.18	1.15
4545.	5.72	1.49	1.14	1.13	1.15	1.17	1.14
4574.	5.74	1.47	1.15	1.14	1.15	1.18	1.15
4625.	5.73	1.48	1.15	1.14	1.17	1.18	1.15
4654.	5.76	1.46	1.15	1.15	1.17	1.18	1.16
4671.	5.92	1.50	1.19	1.19	1.20	1.20	1.19

END OF  
DISCHARGE

113

		.98					
4286.	7.16	.99	1.44	1.45	1.42	1.43	1.43
4323.	7.17	.98	1.44	1.44	1.43	1.43	1.43
4350.	7.16	.98	1.44	1.45	1.42	1.43	1.43
4401.	7.16	.98	1.44	1.44	1.43	1.43	1.43
4430.	7.16	.98	1.43	1.44	1.43	1.43	1.43
4465.	7.15	.97	1.43	1.43	1.42	1.42	1.42
4510.	7.16	.97	1.43	1.44	1.42	1.42	1.43
4545.	7.15	.97	1.43	1.43	1.42	1.42	1.42
4574.	7.15	.97	1.43	1.43	1.42	1.42	1.42
4625.	7.16	.97	1.43	1.45	1.44	1.43	1.43
4654.	7.15	.97	1.43	1.44	1.44	1.43	1.43
4671.	7.10	.98	1.42	1.43	1.42	1.42	1.41

END OF  
CHARGE

PACK NO. 128  
GULTON 5 A.H. NIMBUS

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 130

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT 2.50	1	2	3	4	5	PSIA
3580.	4.43	2.43	1.13	1.12	.00	1.15	1.08	24.135
3617.	4.41	2.40	1.12	1.12	.00	1.15	1.07	24.113
3695.	4.37	2.45	1.11	1.10	.00	1.14	1.05	24.045
3724.	4.38	2.44	1.11	1.10	.00	1.14	1.06	24.314
3759.	4.38	2.45	1.11	1.10	.00	1.14	1.07	24.628
3804.	4.35	2.45	1.10	1.10	.00	1.14	1.05	24.550
3839.	4.35	2.44	1.10	1.10	.00	1.14	1.06	24.550
3868.	4.36	2.43	1.10	1.10	.00	1.14	1.05	24.651
3919.	4.39	2.39	1.11	1.11	.00	1.14	1.06	24.965
3956.	4.42	2.17	1.12	1.12	.00	1.15	1.07	25.088

END OF  
DISCHARGE

		1.63						
3580.	5.81	1.65	1.46	1.47	.00	1.45	1.48	30.816
3617.	5.82	1.64	1.46	1.47	.00	1.45	1.49	30.144
3695.	5.82	1.63	1.46	1.47	.00	1.44	1.50	29.650
3724.	5.82	1.63	1.45	1.46	.00	1.44	1.50	29.919
3759.	5.83	1.63	1.45	1.47	.00	1.44	1.50	30.457
3804.	5.82	1.64	1.45	1.46	.00	1.44	1.50	30.401
3839.	5.82	1.64	1.45	1.47	.00	1.44	1.50	30.413
3868.	5.82	1.64	1.45	1.46	.00	1.44	1.50	30.525
3919.	5.83	1.64	1.45	1.47	.00	1.45	1.50	30.570
3956.	5.83	1.63	1.45	1.47	.00	1.44	1.50	31.029

END OF  
CHARGE

PACK NO. 315  
GULTON 4 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.20	CELL VOLTAGES				
			1	2	3	4	5

8267.	6.24	1.17	1.26	1.26	1.25	1.25	1.25
8293.	6.18	1.17	1.25	1.25	1.23	1.24	1.24
8360.	6.26	1.17	1.26	1.25	1.26	1.26	1.26
8392.	6.24	1.17	1.25	1.25	1.26	1.25	1.25
8472.	6.21	1.17	1.25	1.25	1.25	1.25	1.24
8538.	6.21	1.18	1.25	1.25	1.25	1.24	1.25

END OF  
DISCHARGE

		.69					
8267.	7.74	.58	1.54	1.60	1.52	1.56	1.55
8293.	7.70	.48	1.53	1.59	1.51	1.56	1.53
8360.	7.76	.58	1.54	1.61	1.54	1.56	1.55
8392.	7.76	.51	1.53	1.62	1.53	1.56	1.55
8472.	7.73	.45	1.53	1.62	1.53	1.56	1.54
8538.	7.73	.52	1.53	1.61	1.51	1.56	1.54

END OF  
CHARGE

115

PACK NO. 326  
GULTON 4 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.00	1	2	3	4	5
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8610.	5.98	2.00	1.20	1.21	1.19	1.20	1.20
8689.	5.98	1.99	1.20	1.21	1.20	1.20	1.20
8713.	5.97	2.03	1.20	1.21	1.19	1.19	1.20
8753.	5.97	2.00	1.20	1.20	1.20	1.19	1.20
8833.	5.95	2.01	1.19	1.19	1.18	1.18	1.19
8863.	5.95	2.00	1.20	1.20	1.18	1.19	1.19
8913.	5.96	2.00	1.19	1.21	1.19	1.19	1.20
8977.	5.96	2.00	1.20	1.20	1.19	1.19	1.19

END OF  
DISCHARGE

8610.	7.70	1.15 .62	1.56	1.53	1.54	1.56	1.53
8689.	7.68	.63	1.56	1.53	1.55	1.56	1.53
8713.	7.71	.66	1.55	1.53	1.54	1.56	1.54
8753.	7.69	.65	1.55	1.52	1.55	1.56	1.54
8833.	7.70	.64	1.55	1.52	1.54	1.55	1.52
8863.	7.70	.64	1.55	1.52	1.54	1.55	1.53
8913.	7.71	.65	1.55	1.53	1.55	1.56	1.54
8977.	7.72	.64	1.55	1.52	1.54	1.55	1.52

END OF  
CHARGE

9/1

PACK NO. 204  
GULTON 4 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.00	CELL VOLTAGES				
			1	2	3	4	5

8426.	5.61	1.99	1.14	1.10	1.13	1.14	1.13
8463.	5.66	1.97	1.14	1.13	1.15	1.15	1.14
8490.	5.68	1.98	1.15	1.13	1.15	1.15	1.15
8541.	5.67	1.98	1.14	1.13	1.15	1.15	1.15
8570.	5.69	1.97	1.14	1.14	1.16	1.15	1.15
8605.	5.68	1.99	1.14	1.13	1.16	1.15	1.15
8650.	5.65	1.98	1.14	1.12	1.15	1.14	1.14
8685.	5.63	2.00	1.13	1.12	1.15	1.14	1.15
8716.	5.79	2.01	1.16	1.17	1.18	1.16	1.17
8753.	5.75	2.00	1.15	1.16	1.17	1.15	1.16
8778.	5.80	1.99	1.17	1.17	1.18	1.16	1.17
8810.	5.76	1.98	1.16	1.16	1.17	1.15	1.16

END OF  
DISCHARGE

117

		1.25					
8426.	7.27	1.08	1.46	1.45	1.43	1.51	1.46
8463.	7.28	1.02	1.46	1.45	1.44	1.51	1.46
8490.	7.27	1.04	1.46	1.45	1.44	1.51	1.47
8541.	7.28	1.04	1.46	1.45	1.44	1.51	1.47
8570.	7.31	1.07	1.46	1.45	1.45	1.52	1.48
8605.	7.28	1.06	1.46	1.45	1.45	1.51	1.47
8650.	7.29	1.07	1.46	1.44	1.45	1.51	1.48
8685.	7.27	1.10	1.45	1.44	1.44	1.51	1.47
8716.	7.29	1.10	1.46	1.45	1.45	1.52	1.47
8753.	7.28	1.05	1.46	1.45	1.45	1.52	1.47
8778.	7.33	1.26	1.47	1.46	1.45	1.53	1.48
8810.	7.32	1.31	1.46	1.46	1.45	1.53	1.47

END OF  
CHARGE



PACK NO. 214  
GULTON 4 A.H.

DEPTH OF DISCHARGE 40  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.20	1	2	3	4	5
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7960.	4.45	3.11	1.12	1.14	.00	1.10	1.14
7995.	4.23	3.08	1.02	1.13	.00	1.10	1.03
8024.	4.07	3.13	.94	1.12	.00	1.08	.98
8074.	4.11	3.16	.94	1.12	.00	1.08	1.01
8098.	4.09	3.17	.93	1.11	.00	1.07	1.03
8138.	4.19	3.15	1.00	1.11	.00	1.09	1.03
8184.	3.94	3.14	.87	1.11	.00	1.08	.92
8218.	3.85	3.15	.71	1.11	.00	1.08	.99
8248.	3.88	3.13	.79	1.10	.00	1.07	.94
8298.	3.56	3.10	.52	1.11	.00	1.10	.88
8303.	4.76	3.16	1.25	1.19	.00	1.13	1.24
8337.	4.37	3.17	1.15	1.12	.00	1.09	1.05
8369.	4.24	3.17	1.09	1.11	.00	1.08	1.00

END OF  
DISCHARGE

811

		2.00					
7960.	5.93	1.79	1.45	1.52	.00	1.56	1.44
7995.	5.95	1.81	1.45	1.53	.00	1.57	1.44
8024.	5.92	1.81	1.44	1.52	.00	1.57	1.44
8074.	5.95	1.74	1.44	1.53	.00	1.58	1.44
8098.	5.92	1.80	1.44	1.52	.00	1.56	1.44
8138.	5.94	1.76	1.44	1.52	.00	1.57	1.45
8184.	5.92	1.83	1.43	1.52	.00	1.57	1.44
8218.	5.93	1.87	1.43	1.51	.00	1.57	1.44
8248.	5.94	1.74	1.44	1.52	.00	1.57	1.44
8298.	5.93	1.69	1.43	1.52	.00	1.57	1.44
8303.	5.90	1.96	1.47	1.49	.00	1.51	1.45
8337.	5.95	1.84	1.44	1.52	.00	1.58	1.43
8369.	5.94	1.84	1.44	1.52	.00	1.58	1.43

END OF  
CHARGE

PACK NO. 228  
GULTON 4 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.20	1	2	3	4	5
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8319.	5.91	1.19	1.20	1.20	1.18	1.17	1.19
8356.	5.92	1.20	1.20	1.20	1.19	1.18	1.19
8383.	5.95	1.18	1.21	1.21	1.20	1.19	1.20

END OF  
DISCHARGE

8449.	6.04	1.18	1.21	1.22	1.22	1.20	1.22
8494.	5.99	1.16	1.20	1.21	1.27	1.19	1.21
8529.	5.96	1.19	1.20	1.21	1.21	1.18	1.21
8558.	5.98	1.18	1.20	1.21	1.20	1.19	1.21
8609.	5.98	1.17	1.21	1.22	1.21	1.19	1.21
8646.	5.97	1.20	1.20	1.22	1.20	1.19	1.20
8671.	5.99	1.19	1.20	1.22	1.21	1.19	1.21
8703.	5.95	1.19	1.20	1.21	1.19	1.18	1.20

611

		.96					
8319.	7.13	.74	1.45	1.44	1.42	1.44	1.43
8356.	7.14	.76	1.45	1.44	1.43	1.44	1.44
8383.	7.14	.85	1.45	1.44	1.43	1.44	1.43

END OF  
CHARGE

8449.	7.17	.99	1.45	1.44	1.44	1.44	1.45
8494.	7.16	.98	1.45	1.44	1.44	1.43	1.45
8529.	7.16	.98	1.45	1.43	1.44	1.44	1.45
8558.	7.16	.97	1.45	1.44	1.44	1.43	1.45
8609.	7.17	.97	1.45	1.44	1.45	1.44	1.44
8646.	7.17	.96	1.45	1.44	1.44	1.44	1.44
8671.	7.18	.97	1.46	1.44	1.45	1.44	1.45
8703.	7.13	.76	1.44	1.43	1.43	1.43	1.43

PACK NO. 240  
GULTON 4 A. H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.00	1	2	3	4	5
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8353.	4.35	2.00	1.14	1.06	1.07	.00	1.11
8390.	4.40	1.98	1.15	1.09	1.08	.00	1.12
8417.	4.44	1.98	1.16	1.10	1.09	.00	1.13
8468.	4.32	2.00	1.14	1.05	1.06	.00	1.11
8483.	4.50	1.98	1.13	1.12	1.18	.00	1.12
8528.	4.41	1.97	1.13	1.06	1.14	.00	1.12
8563.	4.39	2.01	1.12	1.09	1.12	.00	1.09
8592.	4.42	2.02	1.14	1.09	1.11	.00	1.12
8643.	4.37	2.01	1.14	1.07	1.10	.00	1.11
8680.	4.34	2.00	1.14	1.05	1.06	.00	1.11
8705.	4.43	2.01	1.16	1.09	1.08	.00	1.14
8737.	4.70	2.00	1.17	1.19	1.20	.00	1.18

END OF  
DISCHARGE

021

		1.60					
8353.	5.80	1.33	1.47	1.47	1.44	.00	1.46
8390.	5.82	1.40	1.47	1.47	1.45	.00	1.47
8417.	5.81	1.46	1.47	1.47	1.44	.00	1.46
8468.	5.81	1.50	1.47	1.46	1.45	.00	1.47
8483.	5.82	1.51	1.47	1.45	1.47	.00	1.47
8528.	5.82	1.40	1.46	1.45	1.47	.00	1.47
8563.	5.86	1.53	1.47	1.48	1.47	.00	1.47
8592.	5.83	1.58	1.47	1.46	1.46	.00	1.47
8643.	5.83	1.58	1.47	1.46	1.46	.00	1.47
8680.	5.81	1.55	1.47	1.45	1.45	.00	1.47
8705.	5.75	1.30	1.46	1.44	1.43	.00	1.45
8737.	5.89	1.66	1.49	1.46	1.49	.00	1.49

END OF  
CHARGE

PACK NO. 216  
GULTON 12 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.60	CELL VOLTAGES				
			1	2	3	4	5

5362.	6.18	3.90	1.25	1.25	1.23	1.25	1.24
5399.	6.09	3.93	1.23	1.24	1.22	1.23	1.23
5426.	6.12	3.51	1.23	1.24	1.23	1.24	1.23
5477.	6.16	3.86	1.24	1.25	1.24	1.24	1.24
5506.	6.12	3.89	1.23	1.24	1.24	1.24	1.23
5541.	6.13	3.87	1.23	1.24	1.24	1.24	1.24
5586.	6.15	3.55	1.23	1.24	1.24	1.24	1.24
5621.	6.20	3.59	1.24	1.25	1.25	1.25	1.25
5652.	6.07	3.48	1.22	1.23	1.23	1.23	1.23
5689.	6.37	3.67	1.28	1.29	1.28	1.29	1.28
5714.	6.34	3.58	1.27	1.28	1.28	1.28	1.28
5746.	6.25	3.60	1.25	1.27	1.26	1.26	1.26

END OF  
DISCHARGE

		2.07					
5362.	7.50	1.06	1.58	1.51	1.47	1.49	1.50
5399.	7.36	1.23	1.53	1.48	1.45	1.46	1.48
5426.	7.38	.03	1.55	1.48	1.45	1.47	1.49
5477.	7.42	1.00	1.56	1.48	1.46	1.47	1.49
5506.	7.42	1.11	1.55	1.48	1.47	1.47	1.49
5541.	7.40	1.08	1.55	1.48	1.46	1.47	1.49
5586.	7.42	.99	1.57	1.48	1.46	1.47	1.49
5621.	7.52	.92	1.59	1.50	1.48	1.48	1.51
5652.	6.94	2.10	1.40	1.40	1.40	1.39	1.40
5689.	7.90	2.09	1.66	1.57	1.56	1.55	1.60
5714.	7.53	.90	1.54	1.52	1.50	1.50	1.52
5746.	7.48	1.12	1.56	1.50	1.47	1.48	1.50

END OF  
CHARGE

121

PACK NO. 301  
GULTON 12 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGES				
			1	2	3	4	5

6176.	4.88	6.01	1.24	1.24	1.23	.00	1.22
6202.	4.84	6.03	1.22	1.22	1.22	.00	1.21
6288.	4.81	5.98	1.22	1.22	1.22	.00	1.21
6314.	4.81	5.99	1.22	1.21	1.21	.00	1.20
6352.	4.78	6.00	1.21	1.22	1.22	.00	1.22
6400.	4.78	6.03	1.21	1.21	1.20	.00	1.20
6432.	4.79	6.01	1.21	1.21	1.20	.00	1.20
6464.	4.78	6.02	1.21	1.21	1.20	.00	1.20
6512.	4.77	6.01	1.21	1.21	1.20	.00	1.20
6544.	4.78	6.00	1.21	1.21	1.20	.00	1.20
6578.	4.77	5.99	1.21	1.21	1.20	.00	1.20
6610.	4.78	5.96	1.21	1.21	1.20	.00	1.20

END OF  
DISCHARGE

122

		3.45					
6176.	6.28	2.10	1.57	1.56	1.55	.00	1.61
6202.	6.25	2.12	1.56	1.55	1.54	.00	1.60
6288.	6.22	2.04	1.56	1.54	1.54	.00	1.60
6314.	6.19	1.88	1.55	1.53	1.52	.00	1.59
6352.	6.15	1.78	1.54	1.53	1.53	.00	1.58
6400.	6.13	1.65	1.54	1.52	1.51	.00	1.56
6432.	6.15	1.67	1.54	1.53	1.51	.00	1.57
6464.	6.20	1.84	1.56	1.54	1.53	.00	1.59
6512.	6.19	1.91	1.55	1.54	1.52	.00	1.58
6544.	6.20	1.85	1.55	1.54	1.53	.00	1.59
6578.	6.17	1.75	1.54	1.53	1.52	.00	1.57
6610.	6.18	1.83	1.54	1.53	1.52	.00	1.57

END OF  
CHARGE

PACK NO. 227  
GULTON 12 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	1	2	3	4	5
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4749.	5.86	5.95	1.19	1.18	1.18	1.18	1.19
5618.	5.48	5.99	1.10	1.12	1.09	1.10	1.12
5655.	5.56	5.94	1.12	1.14	1.11	1.12	1.13
5682.	5.62	5.88	1.13	1.14	1.12	1.13	1.14
5733.	5.61	5.98	1.13	1.14	1.12	1.13	1.14
5794.	5.68	5.90	1.15	1.14	1.14	1.14	1.15
5829.	5.59	5.95	1.13	1.13	1.12	1.12	1.14
5858.	5.62	6.03	1.13	1.14	1.13	1.13	1.14
5909.	5.64	5.97	1.13	1.15	1.13	1.14	1.14
5938.	5.71	5.93	1.16	1.16	1.15	1.15	1.15
5971.	5.62	6.01	1.13	1.14	1.13	1.13	1.14
6003.	5.60	5.97	1.12	1.14	1.12	1.13	1.13

END OF  
DISCHARGE

3.75

4749.	7.25	3.85	1.44	1.46	1.46	1.46	1.47
5618.	7.21	3.90	1.44	1.46	1.44	1.45	1.46
5655.	7.27	3.94	1.45	1.47	1.46	1.47	1.47
5682.	7.26	3.88	1.45	1.47	1.45	1.46	1.47
5733.	7.32	3.87	1.46	1.48	1.47	1.48	1.48
5794.	7.29	3.91	1.45	1.47	1.47	1.47	1.48
5829.	7.23	3.88	1.44	1.46	1.46	1.45	1.47
5858.	7.28	3.90	1.45	1.47	1.47	1.46	1.48
5909.	7.28	3.90	1.45	1.47	1.47	1.47	1.48
5938.	7.34	3.88	1.46	1.48	1.48	1.48	1.49
5971.	7.30	3.91	1.45	1.47	1.47	1.47	1.48
6003.	7.28	3.89	1.44	1.47	1.46	1.46	1.47

END OF  
CHARGE

123

PACK NO. 78  
GULTON 12 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.60	CELL VOLTAGES				
			1	2	3	4	5

6147.	4.45	3.77	1.12	1.11	1.13	.00	1.13
6211.	4.62	3.57	1.17	1.16	1.16	.00	1.17
6321.	4.64	3.59	1.16	1.17	1.18	.00	1.18
6390.	4.61	3.57	1.16	1.15	1.17	.00	1.17
6419.	4.61	3.59	1.16	1.15	1.17	.00	1.17
6470.	4.61	3.58	1.16	1.15	1.17	.00	1.17
6499.	4.61	3.59	1.16	1.15	1.17	.00	1.17
6532.	4.60	3.59	1.16	1.15	1.16	.00	1.17
6563.	4.59	3.57	1.16	1.15	1.16	.00	1.16

END OF  
DISCHARGE

		2.88					
6147.	5.70	1.87	1.43	1.44	1.43	.00	1.42
6211.	5.72	2.00	1.44	1.44	1.43	.00	1.42
6321.	5.75	2.91	1.44	1.44	1.45	.00	1.44
6390.	5.76	2.96	1.44	1.44	1.46	.00	1.44
6419.	5.73	2.84	1.43	1.44	1.45	.00	1.44
6470.	5.76	2.88	1.44	1.45	1.46	.00	1.43
6499.	5.76	2.93	1.44	1.44	1.46	.00	1.43
6532.	5.76	2.89	1.44	1.45	1.45	.00	1.43
6563.	5.77	2.90	1.44	1.45	1.45	.00	1.43

END OF  
CHARGE

124

PACK NO. 213  
GULTON HSI 6 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.00	1	2	3	4	5
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5279.	6.06	2.98	1.22	1.23	1.22	1.22	1.22
5305.	6.03	2.98	1.22	1.22	1.20	1.21	1.21
5343.	6.01	3.00	1.21	1.22	1.20	1.21	1.21
5391.	6.02	3.00	1.22	1.22	1.21	1.22	1.21
5417.	6.01	3.00	1.21	1.21	1.22	1.21	1.21
5455.	6.01	2.99	1.21	1.21	1.21	1.21	1.22
5503.	6.01	3.00	1.21	1.21	1.21	1.21	1.21
5535.	6.00	2.99	1.21	1.21	1.21	1.21	1.21
5567.	5.99	2.99	1.20	1.21	1.21	1.21	1.21
5615.	5.99	2.99	1.20	1.21	1.21	1.21	1.21
5647.	5.99	3.00	1.21	1.21	1.22	1.21	1.21
5681.	5.99	3.00	1.21	1.21	1.21	1.21	1.21
5713.	6.00	3.00	1.20	1.21	1.21	1.21	1.21

END OF  
DISCHARGE

		1.73					
5279.	7.82	1.08	1.56	1.57	1.54	1.60	1.60
5305.	7.83	1.07	1.56	1.57	1.54	1.61	1.59
5343.	7.79	1.00	1.55	1.56	1.53	1.60	1.59
5391.	7.81	1.01	1.55	1.56	1.54	1.61	1.59
5417.	7.80	1.04	1.54	1.56	1.55	1.61	1.59
5455.	7.78	1.04	1.54	1.55	1.54	1.60	1.60
5503.	7.81	1.04	1.55	1.56	1.55	1.60	1.60
5535.	7.76	.98	1.54	1.55	1.54	1.60	1.58
5567.	7.71	.86	1.53	1.54	1.53	1.59	1.58
5615.	7.75	.94	1.54	1.55	1.53	1.59	1.58
5647.	7.73	.86	1.53	1.54	1.53	1.59	1.57
5681.	7.72	.87	1.53	1.54	1.53	1.59	1.58
5713.	7.71	.88	1.53	1.54	1.52	1.59	1.58

END OF  
CHARGE

125



PACK NO. 218  
GULTON HSI 6 A.H.

DEPTH OF DISCHARGE 40  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 4.80	1	2	3	CELL VOLTAGES 4	5
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5265.	5.05	4.70	1.04	1.00	1.06	.99	1.01
5301.	5.13	4.73	1.03	1.05	1.06	1.03	1.02
5329.	4.91	4.73	1.00	.96	1.03	.98	.99
5364.	4.26	4.77	1.12	.15	1.13	1.12	1.10
5376.	4.44	4.73	1.12	.00	1.13	1.11	1.13
5409.	4.39	4.75	1.10	.00	1.12	1.10	1.11
5439.	4.40	4.69	1.10	.00	1.12	1.10	1.11
5489.	4.47	4.62	1.12	.00	1.14	1.12	1.12
5527.	4.41	4.69	1.11	.00	1.12	1.10	1.10
5551.	4.41	4.77	1.12	.00	1.12	1.11	1.10
5583.	4.42	4.73	1.12	.00	1.12	1.10	1.10

END OF  
DISCHARGE

		3.00					
5265.	7.11	1.55	1.44	1.44	1.43	1.43	1.43
5301.	7.14	1.55	1.43	1.43	1.43	1.43	1.44
5329.	7.11	1.58	1.43	1.43	1.42	1.43	1.44
5364.	7.41	1.51	1.50	1.42	1.54	1.48	1.54
5376.	5.88	1.41	1.46	.00	1.50	1.46	1.49
5409.	5.92	1.40	1.46	.00	1.51	1.46	1.50
5439.	5.96	1.35	1.48	.00	1.52	1.48	1.52
5489.	6.01	1.30	1.50	.00	1.54	1.48	1.53
5527.	5.99	1.39	1.50	.00	1.54	1.48	1.53
5551.	6.01	1.41	1.50	.00	1.53	1.49	1.52
5583.	5.61	3.02	1.41	.00	1.41	1.42	1.41

END OF  
CHARGE

126

PACK NO. 238  
GULTON HSI 6 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C.  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.00	1	2	3	CELL VOLTAGES 4	5
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5069.	4.15	2.77	1.20	.68	1.13	1.17	.00
5119.	5.00	2.58	1.28	1.26	1.25	1.25	.00
5143.	4.98	2.55	1.26	1.26	1.25	1.24	.00
5183.	5.05	2.95	1.31	1.17	1.30	1.30	.00
5189.	3.52	2.97	1.17	.00	1.21	1.19	.00
5219.	3.45	2.94	1.16	.00	1.19	1.15	.00
5253.	3.45	2.95	1.16	.00	1.18	1.15	.00
5285.	3.40	2.97	1.15	.00	1.17	1.12	.00

END OF  
DISCHARGE

		2.40					
5069.	5.72	2.17	1.46	1.43	1.40	1.46	.00
5119.	5.75	2.13	1.46	1.45	1.43	1.45	.00
5143.	5.74	1.87	1.45	1.45	1.43	1.45	.00
5183.	5.81	1.74	1.46	1.43	1.46	1.51	.00
5189.	4.45	1.81	1.47	.00	1.48	1.52	.00
5219.	4.40	2.09	1.47	.00	1.46	1.49	.00
5253.	4.39	2.01	1.46	.00	1.46	1.48	.00
5285.	4.38	2.02	1.46	.00	1.45	1.47	.00

END OF  
CHARGE

127

PACK NO. 243  
SONOTONE 3 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 0.90	CELL VOLTAGES				
			1	2	3	4	5

3174.	6.07	.90	1.23	1.23	1.22	1.23	1.23
3210.	6.08	.92	1.23	1.22	1.22	1.23	1.23
3238.	6.07	.90	1.22	1.22	1.21	1.23	1.23
3288.	6.08	.89	1.22	1.23	1.22	1.23	1.23
3318.	6.08	.89	1.22	1.22	1.22	1.23	1.23
3352.	6.08	.91	1.22	1.22	1.22	1.23	1.23
3399.	6.04	.90	1.21	1.22	1.21	1.22	1.23
3432.	6.06	.90	1.21	1.22	1.22	1.23	1.23
3462.	6.04	.91	1.21	1.21	1.21	1.22	1.23
3512.	6.06	.89	1.22	1.22	1.22	1.23	1.23
3550.	6.05	.91	1.21	1.22	1.22	1.22	1.22
3574.	6.05	.92	1.21	1.22	1.21	1.22	1.22
3606.	6.04	.92	1.21	1.22	1.20	1.22	1.22

END OF  
DISCHARGE

		.52					
3174.	7.69	.19	1.47	1.49	1.49	1.63	1.67
3210.	7.67	.24	1.47	1.49	1.49	1.59	1.67
3238.	7.69	.22	1.47	1.49	1.48	1.61	1.68
3288.	7.69	.22	1.47	1.49	1.49	1.61	1.67
3318.	7.70	.22	1.47	1.49	1.50	1.63	1.66
3352.	7.70	.24	1.47	1.49	1.50	1.61	1.68
3399.	7.67	.23	1.46	1.48	1.48	1.63	1.66
3432.	7.71	.22	1.46	1.48	1.49	1.65	1.67
3462.	7.70	.22	1.47	1.48	1.49	1.65	1.66
3512.	7.68	.21	1.46	1.48	1.49	1.64	1.65
3550.	7.76	.25	1.47	1.49	1.50	1.68	1.68
3574.	7.73	.22	1.47	1.49	1.49	1.67	1.67
3606.	7.78	.23	1.46	1.50	1.49	1.68	1.69

END OF  
CHARGE

128

PACK NO. 231  
SONOTONE 3 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGES				
			1	2	3	4	5

3174.	5.86	1.47	1.19	1.19	1.19	1.19	1.15
3238.	5.84	1.47	1.18	1.19	1.17	1.18	1.15
3288.	5.83	1.44	1.18	1.18	1.17	1.18	1.15
3318.	5.81	1.49	1.17	1.17	1.18	1.18	1.15
3352.	5.83	1.48	1.18	1.18	1.18	1.18	1.15
3399.	5.80	1.48	1.17	1.17	1.17	1.18	1.15
3432.	5.81	1.49	1.18	1.18	1.18	1.18	1.15
3462.	5.81	1.50	1.17	1.17	1.17	1.18	1.15
3512.	5.85	1.45	1.18	1.18	1.19	1.19	1.15
3550.	5.82	1.49	1.18	1.18	1.18	1.18	1.15
3574.	5.78	1.52	1.17	1.17	1.17	1.17	1.14
3606.	5.87	1.51	1.19	1.19	1.18	1.19	1.16

END OF  
DISCHARGE

		.86					
3174.	7.78	.57	1.57	1.57	1.59	1.56	1.55
3238.	7.68	.53	1.54	1.55	1.55	1.54	1.53
3288.	7.71	.48	1.55	1.55	1.57	1.55	1.54
3318.	7.71	.49	1.55	1.55	1.57	1.55	1.54
3352.	7.70	.55	1.54	1.55	1.57	1.55	1.54
3399.	7.68	.50	1.54	1.55	1.56	1.54	1.54
3432.	7.70	.53	1.54	1.55	1.57	1.55	1.54
3462.	7.81	.61	1.56	1.57	1.59	1.57	1.56
3512.	7.77	.59	1.56	1.56	1.60	1.56	1.55
3550.	7.72	.55	1.54	1.55	1.58	1.55	1.54
3574.	7.68	.47	1.54	1.55	1.56	1.54	1.54
3606.	7.68	.50	1.54	1.54	1.54	1.54	1.57

END OF  
CHARGE

129

PACK NO. 203  
SONOTONE 3 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGES				
			1	2	3	4	5

3332.	5.50	1.52	1.12	1.11	1.05	1.13	1.12
3369.	5.42	1.51	1.11	1.10	1.03	1.12	1.11
3396.	5.45	1.52	1.13	1.10	1.04	1.12	1.10
3447.	5.37	1.51	1.10	1.08	1.03	1.12	1.08
3476.	5.22	1.51	1.07	1.04	1.00	1.10	1.05
3511.	5.23	1.52	1.07	1.04	1.01	1.10	1.05
3556.	5.66	1.51	1.15	1.13	1.11	1.15	1.16
3591.	5.65	1.51	1.14	1.14	1.11	1.15	1.16
3620.	5.68	1.50	1.15	1.14	1.12	1.16	1.16
3671.	5.68	1.51	1.15	1.15	1.12	1.16	1.15
3700.	5.69	1.49	1.15	1.15	1.13	1.16	1.15
3733.	5.71	1.52	1.16	1.16	1.13	1.16	1.16
3765.	5.69	1.52	1.15	1.15	1.15	1.16	1.15

END OF  
DISCHARGE

		.94					
3332.	7.05	.56	1.42	1.43	1.41	1.42	1.41
3369.	7.06	.57	1.42	1.43	1.42	1.42	1.41
3396.	7.06	.60	1.42	1.43	1.42	1.42	1.41
3447.	7.06	.55	1.42	1.42	1.43	1.42	1.41
3476.	7.08	.56	1.41	1.42	1.44	1.43	1.41
3511.	7.15	.97	1.43	1.44	1.46	1.44	1.44
3556.	7.17	.64	1.44	1.44	1.45	1.45	1.44
3591.	7.17	.75	1.43	1.44	1.45	1.45	1.44
3620.	7.18	.69	1.43	1.44	1.45	1.45	1.44
3671.	7.19	.75	1.44	1.45	1.45	1.46	1.44
3700.	7.19	.63	1.44	1.45	1.46	1.46	1.44
3733.	7.22	.84	1.45	1.46	1.46	1.46	1.45
3765.	7.22	.96	1.45	1.46	1.45	1.46	1.45

END OF  
CHARGE

130

PACK NO. 202  
SONOTONE 3 A.H.

DEPTH OF DISCHARGE 40  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.40	1	2	3	CELL VOLTAGES 4	5
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3012.	4.25	2.38	.99	1.14	.00	1.12	1.04
3047.	4.28	2.35	1.01	1.14	.00	1.12	1.05
3076.	4.22	2.38	.99	1.14	.00	1.10	1.04
3126.	4.28	2.38	1.02	1.13	.00	1.10	1.06
3150.	4.26	2.39	1.01	1.14	.00	1.09	1.06
3190.	4.24	2.35	1.01	1.13	.00	1.07	1.07
3236.	4.22	2.37	1.01	1.13	.00	1.05	1.07
3270.	4.18	2.37	1.00	1.13	.00	1.04	1.05
3300.	4.08	2.34	.95	1.12	.00	1.01	1.02
3350.	4.15	2.21	.98	1.13	.00	1.03	1.04
3380.	4.05	2.25	.95	1.12	.00	1.00	1.01
3414.	4.18	2.24	1.00	1.14	.00	1.03	1.05
3446.	4.14	2.40	.99	1.13	.00	1.02	1.04

END OF  
DISCHARGE

		1.50					
3012.	5.95	1.18	1.48	1.47	.00	1.58	1.46
3047.	5.99	1.22	1.48	1.48	.00	1.60	1.47
3076.	6.03	1.47	1.49	1.48	.00	1.63	1.47
3126.	6.06	1.38	1.49	1.49	.00	1.64	1.48
3150.	5.99	1.50	1.47	1.48	.00	1.60	1.47
3190.	6.01	1.48	1.48	1.48	.00	1.61	1.49
3236.	5.89	1.25	1.46	1.46	.00	1.54	1.47
3270.	5.92	1.22	1.47	1.46	.00	1.56	1.47
3300.	5.96	1.17	1.48	1.47	.00	1.57	1.48
3350.	5.95	1.15	1.47	1.47	.00	1.56	1.48
3380.	5.99	1.05	1.49	1.48	.00	1.57	1.48
3414.	5.96	1.12	1.48	1.48	.00	1.57	1.47
3446.	5.95	1.14	1.48	1.47	.00	1.56	1.47

END OF  
CHARGE

131

PACK NO. 226  
SONOTONE 3 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 0.90	1	2	3	4	5
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3161.	5.84	.89	1.20	1.19	1.17	1.18	1.15
3196.	5.85	.88	1.19	1.19	1.17	1.18	1.15
3225.	5.82	.89	1.19	1.19	1.16	1.18	1.15
3275.	5.81	.88	1.18	1.18	1.17	1.18	1.15
3299.	5.78	.89	1.18	1.17	1.16	1.17	1.14
3339.	5.80	.89	1.18	1.17	1.17	1.17	1.16
3385.	5.78	.90	1.17	1.17	1.17	1.17	1.15
3419.	5.78	.91	1.17	1.17	1.17	1.17	1.15
3449.	5.79	.89	1.18	1.17	1.17	1.17	1.14
3498.	5.78	.90	1.17	1.17	1.16	1.17	1.14
3528.	5.79	.90	1.18	1.17	1.17	1.17	1.14
3562.	5.79	.90	1.18	1.18	1.17	1.17	1.14
3594.	5.79	.91	1.18	1.18	1.16	1.17	1.14

END OF  
DISCHARGE

		.72					
3161.	7.09	.71	1.42	1.43	1.42	1.43	1.43
3196.	7.09	.73	1.41	1.43	1.43	1.43	1.43
3225.	7.09	.72	1.41	1.43	1.42	1.43	1.43
3275.	7.09	.68	1.42	1.43	1.44	1.43	1.43
3299.	7.07	.66	1.40	1.42	1.43	1.42	1.43
3339.	7.08	.70	1.40	1.42	1.44	1.43	1.44
3385.	7.09	.72	1.40	1.43	1.44	1.43	1.44
3419.	7.08	.73	1.40	1.42	1.44	1.42	1.44
3449.	7.08	.73	1.41	1.42	1.44	1.43	1.44
3498.	7.08	.72	1.40	1.43	1.44	1.43	1.44
3528.	7.10	.72	1.41	1.43	1.44	1.43	1.43
3562.	7.09	.70	1.40	1.43	1.44	1.43	1.44
3594.	7.10	.73	1.42	1.43	1.43	1.43	1.44

END OF  
CHARGE

132

PACK NO. 237  
SONOTONE 3 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGES				
			2	3	4	5	

3179.	5.66	1.49	1.17	1.17	1.15	1.16	1.05
3242.	5.62	1.50	1.16	1.16	1.15	1.16	1.04
3268.	5.61	1.50	1.15	1.15	1.15	1.15	1.04
3306.	5.58	1.51	1.14	1.15	1.15	1.14	1.04
3354.	5.59	1.50	1.15	1.15	1.15	1.15	1.03
3386.	5.18	1.49	1.08	1.08	1.07	1.08	.90
3418.	5.59	1.50	1.15	1.15	1.15	1.15	1.04
3466.	5.22	1.49	1.08	1.09	1.08	1.09	.92
3498.	5.28	1.49	1.09	1.10	1.09	1.10	.93
3532.	5.02	1.50	1.08	1.08	1.06	1.08	.76
3564.	5.12	1.49	1.10	1.11	1.07	1.10	.79

END OF  
DISCHARGE

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		1.20					
3179.	7.28	.80	1.44	1.45	1.44	1.45	1.55
3242.	7.30	.77	1.44	1.46	1.44	1.45	1.55
3268.	7.30	.75	1.43	1.45	1.45	1.45	1.57
3306.	7.29	.74	1.43	1.45	1.45	1.45	1.57
3354.	7.24	.61	1.43	1.44	1.44	1.44	1.55
3386.	7.25	.69	1.42	1.44	1.44	1.44	1.54
3418.	7.22	.55	1.42	1.44	1.44	1.44	1.53
3465.	7.21	.78	1.43	1.46	1.44	1.45	1.56
3498.	7.17	.57	1.42	1.44	1.44	1.43	1.49
3532.	7.19	.55	1.42	1.44	1.43	1.44	1.50
3564.	7.21	.55	1.42	1.45	1.43	1.44	1.51

END OF  
CHARGE



PACK NO. 59                      DEPTH OF DISCHARGE 25              TEST TEMPERATURE 0 C  
 GULTON 6 A.H. 3RD ELECTRODE R 10 10 10 10 10              ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.00	3RD ELECT VOLTAGES					CELL VOLTAGES						
			1	2	3	4	5	1	2	3	4	5		
4182.	4.77	3.12	.137	.072	.004	.114	.109	1.20	1.19	.00	1.20	1.19	1.550	END OF
4246.	4.78	3.14	.144	.074	.007	.116	.106	1.20	1.20	.00	1.20	1.20	1.550	DISCHARGE
4326.	4.78	3.12	.143	.086	.003	.118	.106	1.20	1.20	.01	1.20	1.20	1.417	
4401.	4.78	3.09	.140	.079	.002	.118	.103	1.20	1.20	.01	1.20	1.20	1.540	
4469.	4.82	3.00	.139	.079	.000	.123	.105	1.22	1.21	.00	1.21	1.21	1.523	
4550.	4.78	3.00	.141	.076	.000	.119	.104	1.21	1.20	.00	1.20	1.20	1.495	
4182.	6.01	.17	.100	.081	.004	.147	.123	1.50	1.52	.00	1.51	1.50		TRIP
4246.	5.87	.09	.104	.096	.007	.160	.128	1.47	1.48	.00	1.48	1.47		POINT
4326.	5.92	.09	.104	.097	.005	.158	.127	1.48	1.49	.01	1.49	1.48		
4401.	5.94	.09	.099	.089	.000	.155	.126	1.48	1.50	.01	1.49	1.48		
4469.	5.84	.10	.105	.102	.000	.168	.126	1.46	1.47	.01	1.47	1.46		
4550.	6.19	1.38	.105	.097	.000	.149	.120	1.53	1.59	.00	1.55	1.54		
													AH IN	
4182.	5.66	.07	.131	.102	.004	.155	.140	1.42	1.42	.00	1.42	1.42	1.684	END OF
4246.	5.64	.06	.136	.107	.007	.163	.141	1.42	1.41	.00	1.42	1.41	1.682	CHARGE
4326.	5.66	.05	.137	.113	.003	.159	.137	1.42	1.42	.01	1.42	1.42	1.684	
4401.	5.64	.05	.131	.113	.000	.164	.140	1.42	1.41	.01	1.42	1.41	1.718	
4469.	5.64	.07	.130	.110	.000	.165	.135	1.42	1.42	.00	1.42	1.42	1.646	
4550.	5.65	.06	.136	.106	.000	.159	.133	1.42	1.42	.00	1.42	1.42	1.618	

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PACK NO. 71  
GULTON 6 A.H. 3RD ELECTRODE R 10 10 10 10 10

DEPTH OF DISCHARGE 40

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 4.80	3RD ELECT VOLTAGES					CELL VOLTAGES						
			1	2	3	4	5	1	2	3	4	5		
4243.	4.56	4.84	.079	.036	.087	.078	.000	1.17	1.16	1.16	1.09	.00	2.423	END OF
4309.	4.57	4.82	.069	.033	.076	.071	.000	1.17	1.16	1.17	1.10	.00	2.416	DISCHARGE
4388.	4.58	4.76	.084	.052	.089	.078	.000	1.17	1.16	1.17	1.10	.00	2.403	
4469.	4.55	4.74	.073	.040	.093	.078	.000	1.17	1.16	1.16	1.08	.00	2.410	
4533.	4.57	4.84	.067	.037	.088	.079	.000	1.18	1.16	1.17	1.09	.00	2.432	
4243.	6.63	3.87	.090	.082	.104	.141	.000	1.66	1.67	1.66	1.66	.00		TRIP
4309.	5.94	.32	.057	.052	.066	.145	.000	1.48	1.49	1.49	1.51	.00		POINT
4388.	5.90	.18	.059	.053	.071	.149	.000	1.47	1.48	1.47	1.50	.00		
4469.	5.92	.33	.052	.042	.072	.144	.000	1.48	1.48	1.48	1.51	.00		
4533.	5.85	.13	.045	.036	.066	.145	.000	1.46	1.46	1.46	1.49	.00		
4243.	5.87	.40	.112	.100	.130	.144	.000	1.47	1.47	1.47	1.48	.00	AH IN	
4309.	5.82	.40	.112	.097	.120	.148	.000	1.46	1.46	1.46	1.46	.00	2.562	END OF
4388.	5.87	.44	.119	.109	.127	.149	.000	1.47	1.48	1.47	1.48	.00	2.559	CHARGE
4469.	5.86	.42	.112	.102	.134	.148	.000	1.47	1.47	1.47	1.47	.00	2.537	
4533.	5.81	.39	.105	.098	.127	.147	.000	1.46	1.46	1.46	1.45	.00	2.508	
													2.482	

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PACK NO. 11                      DEPTH OF DISCHARGE 40                      TEST TEMPERATURE 25 C  
 GULTON 6 A.H. 3RD ELECTRODE R 24 24 10 8 24                      ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 4.80	3RD ELECT VOLTAGES					CELL VOLTAGES						
			1	2	3	4	5	1	2	3	4	5		
5356.	4.31	4.68	.143	.237	.000	.100	.345	1.12	1.08	.00	1.04	1.09	2.343	END OF
5419.	4.56	4.75	.154	.232	.000	.128	.365	1.15	1.13	.00	1.14	1.15	2.364	DISCHARGE
5499.	4.38	4.62	.134	.227	.000	.117	.350	1.10	1.10	.00	1.09	1.12	2.351	
5530.	4.65	4.72	.130	.291	.000	.158	.382	1.18	1.17	.00	1.18	1.17	2.417	
5596.	4.58	4.74	.172	.292	.000	.171	.377	1.16	1.15	.00	1.17	1.14	2.370	
5680.	4.48	4.72	.161	.279	.000	.180	.360	1.12	1.12	.00	1.16	1.11	2.336	
5356.	5.79	.14	.213	.254	.000	.172	.321	1.45	1.45	.00	1.46	1.45		TRIP
5419.	5.93	.98	.236	.258	.000	.188	.295	1.48	1.49	.00	1.49	1.48		POINT
5499.	6.14	2.33	.235	.258	.000	.192	.292	1.54	1.54	.00	1.54	1.53		
5530.	5.67	.14	.176	.254	.000	.157	.389	1.42	1.43	.00	1.43	1.43		
5596.	5.70	.16	.205	.269	.000	.170	.408	1.43	1.43	.00	1.43	1.43		
5680.	5.75	.16	.200	.274	.000	.179	.360	1.44	1.44	.00	1.45	1.44		
5356.	5.55	.07	.220	.295	.000	.161	.415	1.39	1.39	.00	1.39	1.39		AH IN
5419.	5.54	.08	.236	.300	.000	.169	.421	1.39	1.39	.00	1.39	1.39	2.621	END OF
5499.	5.54	.07	.231	.296	.000	.167	.413	1.39	1.39	.00	1.39	1.39	2.613	CHARGE
5530.	5.53	.08	.215	.311	.000	.164	.427	1.39	1.39	.00	1.39	1.39	2.657	
5596.	5.55	.09	.239	.325	.000	.176	.427	1.39	1.39	.00	1.39	1.39	2.596	
5680.	5.55	.08	.233	.321	.000	.182	.422	1.39	1.40	.00	1.39	1.40	2.532	
													2.578	

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PACK NO. 23                      DEPTH OF DISCHARGE 25                      TEST TEMPERATURE 25 C  
 GULTON 6 A.H. 3RD ELECTRODE R 12 18 20 29 24                      ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.00	3RD ELECT VOLTAGES					CELL VOLTAGES						
			1	2	3	4	5	1	2	3	4	5		
5344.	5.71	3.04	.117	.164	.162	.173	.261	1.15	1.15	1.15	1.14	1.15	1.402	END OF
5408.	5.72	3.07	.124	.176	.171	.200	.257	1.15	1.15	1.15	1.15	1.15	1.454	DISCHARGE
5483.	5.73	3.08	.140	.189	.177	.214	.266	1.16	1.16	1.15	1.15	1.15	1.641	
5514.	5.85	3.10	.159	.182	.171	.204	.291	1.18	1.18	1.17	1.18	1.18	1.629	
5582.	5.82	3.01	.152	.169	.170	.200	.280	1.17	1.17	1.17	1.17	1.17	1.450	
5664.	5.80	2.99	.160	.170	.166	.203	.296	1.17	1.17	1.17	1.17	1.16	1.412	
5344.	7.29	1.49	.180	.232	.247	.235	.285	1.47	1.47	1.46	1.44	1.47		TRIP
5408.	7.10	.03	.189	.245	.252	.254	.294	1.43	1.43	1.43	1.42	1.43		POINT
5483.	7.21	.46	.210	.255	.252	.251	.283	1.45	1.45	1.45	1.44	1.45		
5514.	7.03	.03	.236	.245	.234	.248	.303	1.41	1.41	1.41	1.41	1.41		
5582.	7.10	.13	.216	.224	.232	.248	.282	1.43	1.43	1.43	1.42	1.42		
5664.	7.26	1.31	.217	.222	.233	.249	.280	1.46	1.46	1.45	1.45	1.46		
5344.	6.88	.01	.170	.233	.244	.248	.350	1.38	1.38	1.38	1.38	1.38	1.684	END OF
5408.	6.89	.01	.182	.246	.248	.275	.347	1.38	1.38	1.39	1.38	1.38	1.740	CHARGE
5483.	6.91	.02	.200	.258	.248	.278	.349	1.38	1.39	1.39	1.39	1.39	1.778	
5514.	6.87	.01	.234	.253	.242	.269	.382	1.38	1.38	1.38	1.38	1.38	1.918	
5582.	6.87	.01	.219	.238	.240	.269	.371	1.38	1.38	1.38	1.38	1.38	1.756	
5664.	6.88	.01	.217	.231	.235	.268	.369	1.38	1.38	1.38	1.38	1.38	1.626	

AH IN

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PACK NO. 35                      DEPTH OF DISCHARGE 15                      TEST TEMPERATURE 40 C  
 GULTON 6 A.H. 3RD ELECTRODE R 47 47 47 47 47                      ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.80	3RD ELECT VOLTAGES					CELL VOLTAGES						
			1	2	3	4	5	1	2	3	4	5		
3295.	5.65	1.77	.124	.076	.090	.162	.195	1.13	1.13	1.12	1.14	1.15	.861	END OF
3361.	5.52	1.81	.119	.075	.086	.161	.194	1.10	1.10	1.10	1.13	1.13	.897	DISCHARGE
3441.	5.65	1.81	.127	.089	.092	.166	.187	1.13	1.13	1.12	1.15	1.15	.880	
3521.	5.70	1.83	.128	.091	.102	.170	.178	1.15	1.15	1.14	1.16	1.16	.896	
3585.	5.62	1.83	.122	.085	.100	.163	.175	1.13	1.12	1.12	1.15	1.15	.878	
3295.	6.94	.08	.239	.186	.202	.307	.322	1.39	1.39	1.39	1.39	1.39		TRIP
3361.	6.94	.07	.238	.187	.190	.434	.335	1.39	1.39	1.40	1.39	1.39		POINT
3441.	6.96	.09	.237	.191	.193	.302	.303	1.40	1.40	1.40	1.40	1.40		
3521.	7.00	.16	.231	.185	.194	.287	.283	1.41	1.41	1.41	1.41	1.41		
3585.	6.97	.11	.234	.184	.200	.292	.291	1.40	1.40	1.40	1.40	1.40		
													AH IN	
3295.	6.80	.06	.272	.213	.227	.426	.406	1.37	1.36	1.37	1.36	1.36	1.122	END OF
3361.	6.82	.06	.274	.213	.216	.432	.406	1.37	1.37	1.37	1.37	1.36	1.168	CHARGE
3441.	6.82	.06	.274	.225	.225	.431	.400	1.37	1.37	1.37	1.37	1.37	1.147	
3521.	6.83	.07	.273	.219	.232	.434	.400	1.38	1.37	1.38	1.37	1.38	1.158	
3585.	6.82	.07	.276	.218	.232	.431	.401	1.37	1.37	1.37	1.37	1.37	1.138	

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PACK NO. 47                      DEPTH OF DISCHARGE 25              TEST TEMPERATURE 40 C  
 GULTON 6 A.H. 3RD ELECTRODE R 11 47 12 36 47              ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.00	3RD ELECT VOLTAGES					CELL VOLTAGES						
			1	2	3	4	5	1	2	3	4	5		
3957.	5.70	2.96	.124	.154	.156	.100	.091	1.15	1.15	1.14	1.15	1.14	1.494	END OF
4021.	5.70	2.96	.119	.142	.164	.099	.091	1.15	1.15	1.15	1.14	1.14	1.457	DISCHARGE
4101.	5.72	2.95	.123	.159	.158	.100	.089	1.15	1.16	1.15	1.15	1.15	1.510	
4181.	5.74	2.95	.124	.142	.154	.103	.092	1.16	1.16	1.15	1.16	1.15	1.523	
4246.	5.73	2.99	.126	.159	.152	.100	.086	1.16	1.16	1.15	1.15	1.15	1.496	
4330.	5.70	2.95	.119	.136	.149	.100	.087	1.15	1.15	1.14	1.15	1.14	1.482	
3957.	7.14	.86	.250	.279	.290	.241	.231	1.43	1.43	1.43	1.43	1.43		TRIP
4021.	7.15	1.03	.249	.248	.296	.242	.235	1.43	1.43	1.44	1.43	1.44		POINT
4101.	7.16	1.13	.253	.293	.296	.244	.233	1.44	1.44	1.44	1.44	1.44		
4181.	7.01	.07	.264	.277	.425	.262	.248	1.41	1.41	1.40	1.41	1.40		
4246.	7.22	1.81	.254	.283	.280	.247	.234	1.45	1.45	1.45	1.46	1.45		
4330.	6.99	.08	.259	.259	.426	.254	.244	1.41	1.41	1.40	1.40	1.40		
3957.	6.84	.04	.237	.244	.398	.219	.211	1.38	1.38	1.37	1.37	1.36	2.014	END OF
4021.	6.84	.05	.234	.223	.402	.218	.214	1.38	1.38	1.37	1.37	1.37	2.057	CHARGE
4101.	6.84	.04	.236	.259	.400	.218	.207	1.38	1.38	1.37	1.37	1.37	2.044	
4181.	6.83	.04	.242	.247	.399	.230	.219	1.38	1.38	1.37	1.37	1.37	2.102	
4246.	6.83	.06	.237	.250	.394	.219	.204	1.38	1.38	1.37	1.37	1.36	2.026	
4330.	6.82	.05	.238	.221	.392	.217	.207	1.38	1.38	1.36	1.37	1.36	2.065	

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PACK NO. 60                      DEPTH OF DISCHARGE 25                      TEST TEMPERATURE 0 C  
 G.E. 12 A.H. 3RD ELECTRODE R 3 3 3 3 3                      ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT			3RD ELECT VOLTAGES					CELL VOLTAGES					
NO.	VOLTAGE	6.00	1	2	3	4	5	1	2	3	4	5	
AH OUT													
1807.	6.00	5.97	.189	.087	.028	.016	.020	1.21	1.21	1.21	1.21	1.20	2.917 END OF
1873.	6.00	5.99	.202	.100	.043	.021	.027	1.21	1.21	1.21	1.21	1.20	2.964 DISCHARGE
1963.	6.00	5.98	.224	.107	.039	.023	.021	1.21	1.22	1.21	1.21	1.20	2.962
2031.	6.02	5.93	.207	.099	.031	.020	.020	1.21	1.22	1.21	1.21	1.20	2.946
2096.	6.01	6.02	.217	.106	.033	.018	.021	1.21	1.22	1.21	1.21	1.20	3.030
2180.	5.99	5.96	.205	.099	.033	.019	.021	1.21	1.21	1.20	1.21	1.20	2.948
1807.	7.38	.91	.130	.205	.070	.338	.519	1.47	1.49	1.48	1.48	1.49	TRIP POINT
1873.	7.53	.92	.102	.100	.064	.289	.421	1.49	1.52	1.50	1.51	1.53	
1963.	7.44	.91	.136	.199	.076	.346	.492	1.48	1.51	1.49	1.51	1.51	
2031.	7.41	.86	.130	.208	.070	.335	.506	1.47	1.50	1.47	1.49	1.50	
2096.	7.58	3.08	.204	.261	.102	.331	.375	1.51	1.53	1.51	1.52	1.52	
2180.	7.35	.95	.153	.203	.074	.344	.499	1.46	1.48	1.47	1.48	1.48	
AH IN													
1807.	7.51	.96	.754	.695	.662	.645	.610	1.51	1.52	1.51	1.49	1.49	3.003 END OF
1873.	7.54	.99	.771	.724	.700	.670	.650	1.52	1.52	1.52	1.50	1.50	3.277 CHARGE
1963.	7.55	1.01	.774	.725	.700	.672	.662	1.52	1.53	1.52	1.50	1.50	3.179
2031.	7.49	.95	.754	.677	.646	.629	.597	1.51	1.51	1.51	1.49	1.49	3.309
2096.	7.52	1.06	.770	.730	.704	.676	.656	1.52	1.52	1.51	1.50	1.50	3.478
2180.	7.55	.98	.766	.705	.692	.664	.649	1.52	1.53	1.52	1.50	1.50	3.631

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PACK NO. 48                      DEPTH OF DISCHARGE 40                      TEST TEMPERATURE 0 C  
 G.E. 12 A.H. 3RD ELECTRODE R 3 3 3 3 3                      ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 9.60	3RD ELECT VOLTAGES					CELL VOLTAGES					
			1	2	3	4	5	1	2	3	4	5	
AH OUT													
1151.	5.80	9.39	.058	.092	.012	.004	.007	1.16	1.15	1.18	1.17	1.17	4.734 END OF
1215.	5.79	9.42	.064	.100	.004	.003	.006	1.16	1.16	1.18	1.17	1.17	4.752 DISCHARGE
1295.	5.80	9.35	.070	.109	.008	.005	.007	1.16	1.16	1.18	1.17	1.17	4.720
1372.	5.79	9.35	.069	.111	.011	.006	.009	1.16	1.15	1.18	1.17	1.17	4.716
1438.	5.83	9.34	.079	.111	.012	.007	.006	1.17	1.17	1.18	1.18	1.18	4.713
1521.	5.76	9.32	.079	.106	.010	.006	.006	1.16	1.15	1.17	1.17	1.16	4.706
1151.	7.42	.51	.259	.250	.042	.452	.037	1.48	1.48	1.46	1.51	1.49	TRIP POINT
1215.	7.57	.51	.251	.239	.038	.421	.048	1.51	1.51	1.49	1.56	1.53	
1295.	7.43	3.51	.272	.259	.081	.421	.068	1.48	1.48	1.48	1.51	1.50	
1372.	7.44	3.70	.263	.256	.079	.422	.067	1.48	1.48	1.48	1.51	1.51	
1438.	7.36	2.88	.259	.245	.082	.421	.064	1.47	1.47	1.47	1.50	1.48	
1521.	7.40	2.81	.257	.241	.086	.421	.072	1.48	1.48	1.47	1.51	1.50	
AH IN													
1151.	7.21	.48	.252	.234	.446	.123	.340	1.43	1.42	1.48	1.43	1.47	4.859 END OF
1215.	7.21	.47	.254	.231	.412	.138	.384	1.43	1.43	1.48	1.44	1.47	4.770 CHARGE
1295.	7.20	.46	.256	.239	.418	.136	.343	1.43	1.43	1.47	1.44	1.46	4.922
1372.	7.21	.48	.250	.238	.427	.140	.340	1.43	1.43	1.47	1.44	1.47	4.993
1438.	7.20	.48	.249	.231	.001	.139	.341	1.43	1.43	1.47	1.44	1.46	5.065
1521.	7.19	.47	.253	.224	.420	.140	.361	1.43	1.43	1.46	1.44	1.46	5.013

11/



PACK NO. 175  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 25  
STABISTER

TEST TEMPERATURE -20 C  
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT  
NO. VOLTAGE 2.50 1 2 3 4 5

1450.	3.91	2.50	1.00	1.13	.00	1.07	1.00
1486.	4.08	2.50	1.00	1.11	.00	1.05	.99
1514.	4.07	2.50	.99	1.11	.00	1.04	.99
1537.	4.06	2.50	1.00	1.10	.00	1.03	.99
1567.	4.03	2.51	.99	1.10	.00	1.02	.99
1601.	2.83	2.49	.99	1.09	.00	.14	.96
1610.	2.98	2.46	1.00	1.09	.00	.00	.96
1643.	2.97	2.46	1.00	1.09	.00	.00	.96
1673.	2.97	2.44	.99	1.09	.00	.00	.96
1723.	2.98	2.42	1.00	1.09	.00	.00	.96
1761.	2.97	2.39	.99	1.08	.00	.00	.96
1785.	2.96	2.45	.99	1.08	.00	.00	.96
1817.	3.00	2.43	1.02	1.08	.00	.00	.96

END OF  
DISCHARGE

24/142

		5.00					
1450.	7.63	4.99	1.63	1.59	.00	1.65	1.63
1486.	6.55	4.98	1.63	1.59	.00	1.69	1.63
1514.	6.55	4.97	1.63	1.59	.00	1.69	1.63
1537.	6.59	4.98	1.63	1.59	.00	1.73	1.63
1567.	6.61	5.01	1.62	1.59	.00	1.74	1.63
1601.	5.26	5.04	1.64	1.60	.00	.35	1.64
1610.	4.93	5.08	1.64	1.61	.00	.00	1.65
1643.	4.96	5.06	1.65	1.62	.00	.00	1.64
1673.	4.96	5.08	1.65	1.62	.00	.00	1.64
1723.	4.97	5.07	1.66	1.63	.00	.00	1.65
1761.	5.00	5.01	1.66	1.63	.00	.00	1.66
1785.	4.66	5.00	1.54	1.52	.00	.00	1.55
1817.	4.86	5.03	1.61	1.57	.00	.00	1.62

END OF  
CHARGE

PACK NO. 289  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 40  
STABISTER

TEST TEMPERATURE -20 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES				
		4.00	1	2	3	4	5

1159.	5.22	3.97	1.37	1.30	.00	1.30	1.31
1195.	5.21	3.98	1.37	1.30	.00	1.30	1.31
1223.	5.19	3.99	1.36	1.31	.00	1.30	1.30
1273.	5.20	3.99	1.36	1.32	.00	1.30	1.27
1303.	5.16	4.01	1.36	1.32	.00	1.30	1.24
1337.	4.93	4.01	1.35	1.32	.00	1.30	1.01
1346.	3.86	4.00	1.35	1.30	.00	1.28	.00
1379.	3.85	4.15	1.35	1.31	.00	1.28	.00
1409.	3.86	4.02	1.35	1.31	.00	1.28	.00
1459.	3.59	3.98	1.24	1.22	.00	1.21	.00
1497.	3.81	4.00	1.33	1.31	.00	1.26	.00
1521.	3.88	4.12	1.35	1.33	.00	1.28	.00

END OF  
DISCHARGE

		5.00					
1159.	6.58	5.05	1.60	1.64	.00	1.62	1.67
1195.	6.58	5.02	1.60	1.64	.00	1.62	1.68
1223.	6.59	5.02	1.59	1.64	.00	1.62	1.69
1273.	6.62	5.02	1.60	1.64	.00	1.61	1.73
1303.	6.64	5.06	1.59	1.63	.00	1.61	1.76
1337.	6.68	5.10	1.59	1.63	.00	1.62	1.79
1346.	4.91	5.03	1.58	1.63	.00	1.62	.00
1379.	4.92	5.05	1.58	1.64	.00	1.63	.00
1409.	4.92	5.07	1.57	1.64	.00	1.63	.00
1459.	4.94	5.06	1.58	1.64	.00	1.64	.00
1497.	4.94	5.00	1.59	1.65	.00	1.64	.00
1521.	4.62	5.00	1.48	1.54	.00	1.52	.00

END OF  
CHARGE

143

PACK NO. 92  
SONOTONC 5 A.H.

DEPTH OF DISCHARGE 25  
STABISTER

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.50	1	2	3	4	5
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2263.	5.60	2.48	1.11	1.13	1.14	1.14	1.08
2300.	5.57	2.48	1.11	1.12	1.13	1.12	1.09
2327.	5.57	2.48	1.11	1.12	1.13	1.12	1.09
2352.	5.55	2.46	1.11	1.11	1.13	1.12	1.09
2381.	5.54	2.46	1.10	1.12	1.14	1.13	1.09
2416.	5.53	2.48	1.10	1.10	1.12	1.12	1.08
2496.	5.52	2.48	1.10	1.10	1.12	1.12	1.08
2525.	5.52	2.47	1.10	1.10	1.12	1.12	1.08
2576.	5.52	2.47	1.10	1.10	1.12	1.12	1.08
2605.	5.52	2.45	1.10	1.10	1.12	1.12	1.08
2638.	5.50	2.48	1.09	1.10	1.12	1.11	1.07
2670.	5.54	2.48	1.11	1.14	1.14	1.15	.99

END OF  
DISCHARGE

5/51

		5.00					
2263.	8.02	5.14	1.58	1.58	1.59	1.61	1.68
2300.	8.01	5.10	1.57	1.58	1.59	1.61	1.69
2327.	8.01	5.10	1.57	1.58	1.58	1.60	1.68
2352.	8.01	5.08	1.58	1.58	1.59	1.61	1.69
2381.	7.99	5.06	1.57	1.58	1.59	1.61	1.68
2416.	8.00	5.08	1.57	1.57	1.57	1.60	1.68
2496.	8.00	5.07	1.57	1.57	1.57	1.60	1.68
2525.	8.00	5.06	1.57	1.57	1.57	1.60	1.67
2576.	8.01	5.06	1.58	1.58	1.58	1.61	1.67
2605.	8.01	5.07	1.58	1.58	1.58	1.61	1.68
2638.	8.00	5.05	1.58	1.57	1.58	1.61	1.67
2670.	7.98	5.06	1.57	1.56	1.57	1.60	1.68

END OF  
CHARGE

PACK NO. 322  
SONOTONC 5 A.H.

DEPTH OF DISCHARGE 40  
STABISTER

TEST TEMPERATURE 0  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 4.00	1	2	3	CELL VOLTAGES 4	5
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2140.	4.44	3.74	1.11	1.17	.00	1.12	1.10
2170.	4.40	3.71	1.09	1.14	.00	1.11	1.10
2204.	4.39	3.65	1.09	1.14	.00	1.11	1.10
2251.	4.29	4.01	1.07	1.12	.00	1.08	1.08
2284.	4.29	3.99	1.07	1.12	.00	1.08	1.08
2314.	4.26	3.99	1.07	1.11	.00	1.06	1.07
2364.	4.23	4.01	1.06	1.11	.00	1.05	1.07
2402.	4.24	3.98	1.06	1.10	.00	1.06	1.07
2426.	4.22	3.97	1.05	1.10	.00	1.06	1.07
2462.	4.34	3.99	1.07	1.11	.00	1.10	1.09

END OF  
DISCHARGE

145

		5.00					
2140.	6.18	5.04	1.55	1.56	.00	1.52	1.58
2170.	6.17	5.12	1.54	1.55	.00	1.51	1.58
2204.	6.15	5.06	1.54	1.55	.00	1.50	1.58
2251.	6.15	4.99	1.56	1.55	.00	1.49	1.57
2284.	6.13	4.99	1.55	1.55	.00	1.48	1.57
2314.	6.13	4.99	1.55	1.55	.00	1.47	1.57
2364.	6.07	5.02	1.54	1.55	.00	1.42	1.57
2402.	6.13	5.02	1.56	1.55	.00	1.45	1.57
2426.	6.14	4.87	1.57	1.55	.00	1.47	1.57
2462.	6.28	5.01	1.57	1.56	.00	1.57	1.57

END OF  
CHARGE

PACK NO. 273  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 25  
STABISTER

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.50	1	2	3	4	5
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2615.	4.11	2.46	1.01	.01	1.02	1.09	1.04
2641.	4.13	2.43	1.02	.01	1.02	1.10	1.04
2727.	4.13	2.44	1.00	.01	1.03	1.10	1.05
2753.	4.14	2.45	.99	.01	1.05	1.10	1.05
2790.	3.12	2.38	.02	.02	1.09	1.08	1.00
2822.	3.15	2.38	.02	.01	1.10	1.11	1.02
2854.	3.13	2.37	.02	.01	1.09	1.10	1.02
2902.	3.09	2.33	.02	.01	1.07	1.08	.99
2934.	3.13	2.36	.02	.01	1.09	1.09	1.02
2968.	3.13	2.37	.02	.01	1.08	1.09	1.02
3000.	3.14	2.34	.02	.01	1.08	1.09	1.03

END OF  
DISCHARGE

961

		5.00					
2615.	5.91	4.95	1.54	.01	1.44	1.44	1.44
2641.	5.91	5.06	1.56	.04	1.43	1.43	1.44
2727.	5.94	4.95	1.56	.04	1.44	1.44	1.46
2753.	5.94	5.00	1.55	.03	1.45	1.44	1.46
2790.	4.41	5.06	.04	.03	1.45	1.44	1.44
2822.	4.37	5.00	.04	.03	1.44	1.43	1.42
2854.	4.37	5.00	.04	.04	1.44	1.43	1.42
2902.	4.35	5.01	.04	.04	1.42	1.42	1.42
2934.	4.37	5.16	.04	.04	1.44	1.43	1.41
2968.	4.37	4.97	.04	.03	1.44	1.43	1.43
3000.	4.35	5.07	.04	.04	1.43	1.42	1.43

END OF  
CHARGE

PACK NO. 299  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 25  
STABISTER

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.50	1	2	3	4	5
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2461.	5.25	2.50	1.12	1.08	.97	1.07	1.05
2498.	5.25	2.51	1.12	1.08	.97	1.07	1.04
2525.	5.25	2.51	1.12	1.09	.98	1.07	1.05
2576.	5.24	2.46	1.12	1.08	.98	1.07	1.04

END OF  
DISCHARGE

2627.	5.70	2.53	1.18	1.15	1.13	1.15	1.14
2656.	5.57	2.50	1.15	1.11	1.11	1.12	1.12
2689.	5.50	2.53	1.14	1.10	1.09	1.11	1.11

		5.00					
2461.	7.37	5.04	1.49	1.49	1.46	1.47	1.47
2498.	7.46	5.04	1.49	1.48	1.47	1.46	1.47
2525.	7.37	5.03	1.49	1.49	1.47	1.47	1.48
2576.	7.38	5.04	1.49	1.49	1.48	1.48	1.48
2627.	7.37	5.04	1.49	1.49	1.48	1.47	1.48
2656.	7.36	5.04	1.48	1.48	1.48	1.47	1.48
2689.	7.36	5.02	1.48	1.48	1.47	1.47	1.48

END OF  
CHARGE

147

PACK NO. 312  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE .40  
STABISTER

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.51	1	2	3	4	5
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2362.	4.04	1.52	1.03	.00	1.07	.98	1.00
2397.	4.04	1.47	1.03	.00	1.09	.99	.97
2426.	4.03	1.49	1.03	.00	1.08	.99	.97
2476.	4.03	1.48	1.03	.00	1.08	.98	.97
2500.	3.99	1.50	1.02	.00	1.07	.98	.94
2540.	3.98	1.48	1.02	.00	1.07	.98	.94
2586.	4.00	1.48	1.02	.00	1.07	.96	.98
2620.	3.96	1.49	1.01	.00	1.08	.96	.97
2650.	3.97	1.47	1.00	.00	1.10	.97	.96
2782.	3.92	1.49	.99	.00	1.09	.95	.95

END OF  
DISCHARGE

5.00

2362.	5.96	4.99	1.48	.00	1.46	1.46	1.49
2397.	5.96	5.01	1.48	.00	1.46	1.46	1.49
2426.	5.95	5.03	1.47	.00	1.45	1.46	1.49
2476.	5.95	5.04	1.48	.00	1.45	1.45	1.49
2500.	5.93	5.02	1.47	.00	1.44	1.45	1.48
2540.	5.92	5.06	1.47	.00	1.44	1.45	1.48
2586.	5.92	4.95	1.47	.00	1.44	1.45	1.48
2620.	5.90	4.96	1.47	.00	1.45	1.45	1.49
2650.	5.91	4.99	1.47	.00	1.45	1.45	1.48
2782.	5.91	4.99	1.47	.00	1.44	1.45	1.48

END OF  
CHARGE

841

PACK NO. 182  
YARDNEY 12 AH AGZN

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 130

TEST TEMPERATURE 25  
ORBIT PERIOD 1.5 HRS.

CYCLE PACK CURRENT  
NO. VOLTAGE 6.00 1 2 3 4 5

226.	5.39	5.83	1.08	1.08	1.08	1.08	1.08
252.	5.38	5.79	1.08	1.08	1.08	1.08	1.08
338.	5.38	5.84	1.08	1.08	1.08	1.08	1.08
364.	5.38	5.86	1.08	1.08	1.08	1.08	1.08
402.	5.36	6.00	1.08	1.07	1.07	1.07	1.07
450.	5.32	5.94	1.07	1.07	1.06	1.07	1.07
482.	5.37	5.86	1.08	1.08	1.07	1.08	1.07
514.	5.33	5.91	1.07	1.07	1.07	1.07	1.07
594.	5.34	5.89	1.08	1.07	1.07	1.07	1.07
628.	5.35	5.88	1.07	1.07	1.07	1.07	1.07
660.	5.36	5.91	1.07	1.08	1.07	1.07	1.07

END OF  
DISCHARGE

651

		3.90					
226.	7.80	1.43	1.57	1.56	1.56	1.55	1.56
252.	7.79	1.47	1.57	1.55	1.56	1.55	1.55
338.	7.77	1.45	1.57	1.56	1.56	1.56	1.56
364.	7.78	1.57	1.56	1.56	1.57	1.56	1.56
402.	7.74	1.36	1.55	1.53	1.54	1.53	1.53
450.	7.79	1.97	1.57	1.55	1.55	1.56	1.55
482.	7.68	1.12	1.55	1.53	1.53	1.53	1.54
514.	7.77	1.78	1.56	1.55	1.55	1.55	1.55
594.	7.70	1.34	1.55	1.54	1.53	1.54	1.54
628.	7.70	1.50	1.54	1.54	1.53	1.54	1.54
660.	7.72	1.51	1.54	1.54	1.54	1.54	1.54

END OF  
CHARGE



PACK NO. 609  
DELCO 25 A.H. AG ZN

DEPTH OF DISCHARGE 40  
PERCENT OF RECHARGE

TEST TEMPERATURE 25 C  
ORBIT PERIOD 24 HRS.

CYCLE PACK CURRENT  
NO. VOLTAGES 10.00

CELL VOLTAGES

			1	2	3	4	5	6	7	8	9	10	
53.	14.48	10.02	1.46	1.46	1.44	1.45	1.46	1.45	1.45	1.45	1.43	1.44	END OF
62.	14.65	9.99	1.47	1.47	1.47	1.47	1.48	1.46	1.46	1.45	1.45	1.45	DISCHARGE
72.	14.42	10.02	1.45	1.45	1.45	1.45	1.45	1.44	1.44	1.44	1.43	1.43	
		1.00											
53.	18.78	.00	1.89	1.89	1.87	1.88	1.88	1.87	1.87	1.87	1.87	1.86	END OF
62.	18.77	.02	1.88	1.88	1.89	1.88	1.88	1.87	1.87	1.86	1.87	1.86	CHARGE
72.	18.78	.00	1.88	1.89	1.87	1.88	1.88	1.87	1.87	1.86	1.87	1.86	

150

PACK NO. 257  
YARDNEY 5 A.H.

DEPTH OF DISCHARGE 20  
PERCENT OF RECHARGE .3A

TEST TEMPERATURE 0  
ORBIT PERIOD 24 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.00	1	2	3	4	5
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138.	3.34	.97	.77	.94	1.07	1.07	1.06
147.	4.35	.99	.00	1.06	1.13	1.07	1.14
157.	4.24	.99	.00	1.04	1.09	1.07	1.08

END OF  
DISCHARGE

		.30					
138.	7.45	.01	1.51	1.50	1.50	1.51	1.48
147.	6.04	.03	.00	1.50	1.52	1.58	1.50
157.	5.99	.00	.00	1.46	1.47	1.65	1.45

END OF  
CHARGE

151

PACK NO. 69  
YARDNEY 5 A.H.

DEPTH OF DISCHARGE 20  
PERCENT OF RECHARGE .3A

TEST TEMPERATURE 25 C  
ORBIT PERIOD 24 HRS.

CYCLE PACK CURRENT  
NO. VOLTAGE 1.00

CELL VOLTAGES

2 3 4 5

95.	5.36	1.00		1.09	1.08	1.08	1.07
104.	5.35	1.00	1.07	1.08	1.08	1.08	1.08
114.	5.36	1.00	1.08	1.08	1.09	1.08	1.08

END OF  
DISCHARGE

		.30					
95.	7.59	.00	1.54	1.55	1.47	1.55	1.53
104.	7.42	.02	1.49	1.49	1.50	1.49	1.51
114.	7.39	.02	1.48	1.49	1.48	1.48	1.52

END OF  
CHARGE

157

PACK NO. 233  
YARDNEY 5 A.H.

DEPTH OF DISCHARGE 20  
PERCENT OF RECHARGE .3A

TEST TEMPERATURE 25 C  
ORBIT PERIOD 24 HRS.

CYCLE PACK CURRENT  
NO. VOLTAGE 1.00 1 2 3 4 5

95.	5.66	1.00	1.14	1.13	1.14	1.15	1.15
104.	5.84	1.01	1.17	1.16	1.18	1.00	1.19
114.	5.37	.99	1.08	1.09	1.09	1.08	1.09

END OF  
DISCHARGE

		.30					
95.	7.54	.00	1.52	1.53	1.51	1.52	1.51
104.	7.48	.05	1.51	1.51	1.51	1.50	1.51
114.	7.39	.03	1.49	1.51	1.48	1.48	1.48

END OF  
CHARGE

153

PACK NO. 232  
GULTON 5.6 A.H. RS

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE -20 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT 2.80	1	2	3	4	5
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428.	5.78	2.77	1.17	1.18	1.16	1.16	1.17
459.	5.67	2.79	1.14	1.15	1.14	1.14	1.14
542.	5.67	2.80	1.14	1.15	1.14	1.14	1.14
572.	5.78	2.77	1.16	1.17	1.17	1.16	1.17
606.	5.76	2.81	1.16	1.16	1.17	1.16	1.16
652.	5.71	2.79	1.14	1.16	1.15	1.15	1.15
685.	5.71	2.77	1.14	1.16	1.15	1.15	1.15
716.	5.70	2.80	1.14	1.15	1.15	1.15	1.15
766.	5.67	2.72	1.13	1.15	1.15	1.14	1.13
828.	5.93	2.78	1.19	1.20	1.19	1.19	1.20
859.	5.64	2.79	1.13	1.15	1.14	1.14	1.13

END OF  
DISCHARGE

		1.61					
428.	7.47	.89	1.51	1.52	1.50	1.50	1.50
459.	7.46	.96	1.50	1.51	1.49	1.50	1.50
542.	7.65	1.19	1.54	1.56	1.53	1.54	1.54
572.	7.62	.86	1.53	1.54	1.54	1.53	1.53
606.	7.64	.85	1.53	1.55	1.54	1.54	1.53
652.	7.58	.90	1.52	1.54	1.53	1.53	1.52
685.	7.59	.90	1.52	1.54	1.53	1.53	1.52
716.	7.59	.89	1.52	1.53	1.52	1.53	1.52
766.	7.54	.83	1.51	1.53	1.53	1.52	1.51
828.	7.52	1.22	1.51	1.53	1.51	1.51	1.50
859.	7.57	.92	1.51	1.53	1.52	1.53	1.52

END OF  
CHARGE

154

PACK NO. 244  
GULTON 5.6 A.H. FRS

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE -20 C  
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT  
NO. VOLTAGES 2.80 1 2 3 4 5

428.	5.80	2.69	1.17	1.18	1.16	1.17	1.17
459.	5.78	2.76	1.17	1.17	1.16	1.16	1.16
492.	5.65	2.81	1.14	1.15	1.13	1.14	1.14
542.	5.77	2.76	1.16	1.17	1.16	1.16	1.16
572.	5.79	2.75	1.16	1.17	1.17	1.16	1.17
606.	5.79	2.76	1.16	1.17	1.17	1.17	1.17
652.	5.77	2.75	1.16	1.17	1.16	1.16	1.17
685.	5.79	2.76	1.16	1.17	1.16	1.16	1.17
716.	5.78	2.76	1.16	1.17	1.16	1.16	1.17
804.	5.77	2.74	1.16	1.17	1.16	1.16	1.17
828.	5.93	2.77	1.19	1.20	1.19	1.19	1.20
859.	5.74	2.77	1.15	1.16	1.15	1.15	1.16

END OF  
DISCHARGE

155

		1.61					
428.	7.68	.72	1.55	1.55	1.55	1.54	1.55
459.	7.68	.76	1.55	1.55	1.54	1.54	1.55
492.	7.49	.95	1.51	1.52	1.50	1.51	1.50
542.	7.76	.90	1.57	1.57	1.56	1.55	1.56
572.	7.77	.87	1.56	1.56	1.57	1.56	1.57
606.	7.79	.88	1.57	1.56	1.58	1.56	1.57
652.	7.72	.84	1.55	1.55	1.56	1.55	1.56
685.	7.73	.81	1.56	1.56	1.56	1.55	1.56
716.	7.72	.86	1.56	1.56	1.55	1.55	1.56
804.	7.70	.77	1.55	1.55	1.56	1.55	1.55
828.	7.68	1.30	1.55	1.55	1.54	1.54	1.55
859.	7.74	.81	1.56	1.56	1.56	1.55	1.56

END OF  
CHARGE

PACK NO. 200  
GULTON 5.6 A.H. FRS

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT 2.80	CELL VOLTAGES				
			1	2	3	4	5

704.	5.87	2.77	1.19	1.19	1.18	1.18	1.18
740.	5.87	2.76	1.19	1.19	1.17	1.18	1.18
768.	5.85	2.81	1.19	1.18	1.17	1.17	1.18
818.	5.87	2.77	1.18	1.18	1.17	1.17	1.17
848.	5.86	2.78	1.18	1.17	1.16	1.17	1.17
882.	5.84	2.80	1.18	1.17	1.16	1.16	1.17
929.	5.82	2.82	1.17	1.16	1.16	1.16	1.16
962.	5.84	2.81	1.18	1.17	1.16	1.16	1.16
992.	5.83	2.81	1.17	1.17	1.16	1.16	1.16
1042.	5.84	2.83	1.18	1.17	1.16	1.16	1.17
1080.	5.85	2.77	1.18	1.17	1.16	1.16	1.17
1104.	5.84	2.80	1.18	1.17	1.16	1.16	1.17
1136.	5.83	2.79	1.18	1.18	1.17	1.17	1.17

END OF  
DISCHARGE

156

		1.61					
704.	7.64	.91	1.54	1.55	1.52	1.54	1.52
740.	7.60	.84	1.53	1.54	1.52	1.53	1.52
768.	7.61	.89	1.53	1.54	1.50	1.53	1.52
818.	7.64	.95	1.53	1.53	1.52	1.53	1.52
848.	7.63	.94	1.53	1.53	1.51	1.53	1.52
882.	7.63	.94	1.53	1.53	1.51	1.53	1.52
929.	7.67	1.04	1.53	1.53	1.52	1.53	1.52
962.	7.66	.98	1.53	1.53	1.52	1.53	1.52
992.	7.65	1.02	1.53	1.53	1.52	1.53	1.52
1042.	7.70	1.08	1.54	1.54	1.53	1.54	1.53
1080.	7.72	1.14	1.55	1.54	1.53	1.55	1.53
1104.	7.73	1.20	1.54	1.55	1.53	1.55	1.53
1136.	7.72	1.20	1.55	1.56	1.54	1.55	1.54

END OF  
CHARGE

PACK NO. 390  
GULTON 5.6 A.H. RS

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT  
NO. VOLTAGES 2.80 1 2 3 4 5

720.	5.86	2.80	1.19	1.17	1.17	1.18	1.17
755.	5.83	2.81	1.18	1.17	1.17	1.17	1.16
784.	5.83	2.80	1.18	1.17	1.17	1.17	1.16
834.	5.83	2.80	1.18	1.17	1.17	1.17	1.16
858.	5.82	2.83	1.17	1.16	1.16	1.17	1.16
898.	5.82	2.81	1.18	1.16	1.16	1.17	1.16
944.	5.82	2.80	1.18	1.16	1.16	1.17	1.16
978.	5.82	2.79	1.17	1.16	1.16	1.16	1.16
1008.	5.82	2.80	1.18	1.16	1.16	1.17	1.16
1058.	5.85	2.79	1.18	1.17	1.17	1.17	1.17
1122.	5.84	2.82	1.18	1.16	1.16	1.17	1.16
1154.	5.83	2.82	1.18	1.17	1.16	1.17	1.16

END OF  
DISCHARGE

157

		1.61					
720.	7.64	.69	1.53	1.52	1.53	1.52	1.52
755.	7.62	.75	1.54	1.52	1.53	1.52	1.52
784.	7.63	.71	1.53	1.52	1.53	1.52	1.52
834.	7.62	.74	1.53	1.52	1.53	1.52	1.52
858.	7.64	.77	1.53	1.52	1.52	1.52	1.52
898.	7.63	.77	1.53	1.52	1.52	1.51	1.52
944.	7.66	.84	1.54	1.53	1.52	1.52	1.52
978.	7.65	.80	1.54	1.52	1.52	1.52	1.52
1008.	7.78	1.07	1.56	1.55	1.55	1.54	1.55
1058.	7.81	1.08	1.57	1.56	1.56	1.55	1.56
1122.	7.81	.99	1.56	1.56	1.56	1.54	1.56
1154.	7.80	1.00	1.56	1.56	1.56	1.54	1.56

END OF  
CHARGE



PACK NO. 276  
GULTON 5.6 A.H. FRS

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT 2.80	1	2	3	4	5
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868.	5.51	2.74	1.09	1.10	1.13	1.12	1.11
897.	5.44	2.75	1.08	1.08	1.12	1.10	1.09
947.	5.48	2.76	1.09	1.09	1.13	1.11	1.10
971.	5.36	2.79	1.06	1.06	1.12	1.08	1.08
1011.	5.37	2.77	1.06	1.06	1.13	1.08	1.08
1057.	5.34	2.78	1.06	1.06	1.12	1.08	1.07
1121.	5.30	2.78	1.04	1.05	1.12	1.07	1.06
1171.	5.28	2.78	1.04	1.05	1.10	1.06	1.06
1235.	5.37	2.76	1.06	1.07	1.10	1.10	1.08
1267.	5.29	2.77	1.04	1.05	1.08	1.08	1.07

END OF  
DISCHARGE

158

		1.75					
868.	7.30	1.76	1.47	1.48	1.47	1.46	1.46
897.	7.27	1.76	1.47	1.48	1.46	1.46	1.46
947.	7.32	1.76	1.47	1.48	1.47	1.47	1.47
971.	7.26	1.77	1.46	1.47	1.46	1.46	1.46
1011.	7.28	1.77	1.46	1.47	1.47	1.46	1.47
1057.	7.27	1.77	1.46	1.47	1.47	1.46	1.46
1121.	7.29	1.76	1.46	1.47	1.48	1.46	1.47
1171.	7.29	1.76	1.46	1.48	1.47	1.46	1.47
1235.	7.30	1.76	1.46	1.48	1.47	1.46	1.46
1267.	7.28	1.76	1.46	1.48	1.46	1.46	1.46

END OF  
CHARGE

PACK NO. 396  
GULTON 5.6 A.H. RS

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT  
NO. VOLTAGES 2.80 1 2 3 4 5

831.	5.83	2.64	1.18	1.20	1.16	1.17	1.16
857.	5.69	2.63	1.16	1.17	1.13	1.14	1.13
943.	5.63	2.66	1.14	1.15	1.13	1.13	1.11
969.	5.62	2.67	1.14	1.14	1.12	1.12	1.11
1007.	5.53	2.68	1.11	1.13	1.12	1.11	1.11
1055.	5.52	2.69	1.12	1.13	1.11	1.11	1.09
1087.	5.76	2.65	1.14	1.17	1.17	1.16	1.15
1119.	5.54	2.62	1.10	1.14	1.13	1.11	1.10
1167.	5.47	2.60	1.08	1.14	1.11	1.10	1.08
1204.	5.49	2.68	1.11	1.13	1.12	1.10	1.08
1233.	5.51	2.61	1.09	1.13	1.12	1.11	1.09
1265.	5.51	2.62	1.08	1.14	1.13	1.11	1.10

END OF  
DISCHARGE

159

		1.75					
831.	7.21	1.34	1.46	1.45	1.44	1.45	1.45
857.	7.19	1.24	1.46	1.45	1.43	1.45	1.45
943.	7.23	1.20	1.46	1.44	1.44	1.45	1.45
969.	7.21	1.22	1.46	1.44	1.44	1.45	1.44
1007.	7.19	1.29	1.45	1.44	1.45	1.44	1.46
1055.	7.22	1.32	1.46	1.44	1.45	1.45	1.46
1087.	7.18	1.26	1.45	1.44	1.45	1.45	1.45
1119.	7.18	1.33	1.45	1.44	1.45	1.45	1.45
1167.	7.21	1.48	1.45	1.45	1.45	1.45	1.45
1204.	7.22	1.25	1.46	1.45	1.46	1.45	1.45
1233.	7.19	1.26	1.45	1.44	1.45	1.45	1.45
1265.	7.19	1.28	1.45	1.44	1.44	1.44	1.45

END OF  
CHARGE

PACK NO. 230  
GULTON 5.6 A.H. RS

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT			CELL VOLTAGES				
NO.	VOLTAGES	2.80	1	2	3	4	5

939.	5.28	2.68	1.03	1.09	1.05	1.07	1.09
965.	4.49	2.62	.90	.93	.89	.89	.92
1003.	4.38	2.61	.90	.94	.90	.82	.86
1051.	4.68	2.68	.93	.97	.93	.95	.93
1077.	4.69	2.64	.92	.96	.93	.96	.95
1115.	4.85	2.68	.96	1.00	.97	.98	1.00
1163.	4.10	2.52	.85	.89	.84	.77	.78
1195.	5.31	2.72	1.04	1.10	1.05	1.08	1.09

END OF  
DISCHARGE

		2.24					
939.	7.18	1.58	1.47	1.44	1.44	1.43	1.44
965.	7.16	1.16	1.46	1.45	1.44	1.44	1.43
1003.	7.14	1.07	1.45	1.44	1.43	1.43	1.43
1051.	7.20	1.25	1.47	1.45	1.46	1.44	1.43
1077.	7.15	1.06	1.45	1.44	1.45	1.43	1.43
1115.	7.16	1.09	1.45	1.44	1.45	1.43	1.44
1163.	7.17	1.14	1.46	1.44	1.46	1.43	1.43
1195.	7.21	1.27	1.46	1.45	1.47	1.44	1.44

END OF  
CHARGE

160

PACK NO. 242  
GULTON 5.6 A.H. FRS

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT  
NO. VOLTAGES 2.80 1 2 3 4 5

941.	5.05	2.76	1.03	1.01	1.02	.99	1.03
978.	5.15	2.75	1.05	1.03	1.06	1.02	1.04
1005.	5.19	2.77	1.05	1.04	1.07	1.02	1.05
1056.	5.15	2.75	1.05	1.03	1.06	1.02	1.04
1085.	5.17	2.74	1.04	1.03	1.07	1.02	1.05
1120.	5.09	2.77	1.03	1.01	1.05	1.00	1.04
1165.	5.21	2.72	1.05	1.03	1.08	1.03	1.06
1200.	5.12	2.76	1.04	1.01	1.06	1.00	1.04
1229.	5.15	2.74	1.04	1.02	1.07	1.02	1.05
1280.	5.11	2.75	1.03	1.02	1.05	1.02	1.04
1309.	5.21	2.71	1.05	1.04	1.08	1.03	1.06
1342.	5.07	2.76	1.02	1.00	1.05	1.00	1.03
1374.	5.11	2.76	1.03	1.02	1.05	1.01	1.04

END OF  
DISCHARGE

191

		2.24					
941.	7.25	2.20	1.46	1.47	1.44	1.47	1.45
978.	7.25	2.22	1.47	1.47	1.45	1.46	1.45
1005.	7.25	2.22	1.47	1.47	1.44	1.46	1.45
1056.	7.26	2.24	1.47	1.47	1.45	1.47	1.45
1085.	7.25	2.23	1.46	1.46	1.46	1.46	1.45
1120.	7.25	2.26	1.46	1.46	1.46	1.47	1.46
1165.	7.25	2.17	1.46	1.46	1.46	1.46	1.45
1200.	7.25	2.24	1.46	1.46	1.46	1.46	1.46
1229.	7.25	2.24	1.46	1.46	1.46	1.46	1.46
1280.	7.26	2.27	1.46	1.47	1.46	1.47	1.45
1309.	7.25	2.22	1.46	1.46	1.46	1.46	1.45
1342.	7.26	2.22	1.46	1.46	1.46	1.47	1.45
1374.	7.26	2.23	1.46	1.47	1.46	1.47	1.45

END OF  
CHARGE

PACK NO. 239  
GUE COUL 3.6 A.H.

DEPTH OF DISCHARGE 40  
PERCENT OF RECHARGE

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT  
NO. VOLTAGE 2.88

CELL VOLTAGES

			1	2	3	4	5	1	2	3	4	5	
1296.	10.83	2.82	1.11	1.06	1.08	1.10	1.08	1.11	1.08	1.06	1.08	1.09	END OF
1333.	10.18	2.78	1.01	.97	.99	1.09	1.00	1.10	1.07	1.00	.98	1.00	DISCHARGE
1411.	9.79	2.82	.94	.89	.95	1.08	.95	1.09	1.03	.96	.96	.96	
1427.	11.18	2.83	1.14	1.10	1.11	1.13	1.13	1.14	1.11	1.11	1.08	1.11	
1472.	9.68	2.84	.94	.87	.93	1.08	.92	1.08	1.01	.98	.94	.94	
1507.	9.88	2.82	.96	.96	.96	1.08	.96	1.09	1.00	.96	.95	.96	
1536.	10.13	2.80	.99	.97	.99	1.09	1.01	1.09	1.00	.99	.99	1.01	
1587.	9.63	2.79	.92	.87	.93	1.08	.94	1.08	.97	.96	.94	.96	
1616.	8.78	2.76	.75	.68	.80	1.06	.83	1.07	.95	.92	.86	.87	
1649.	10.64	2.84	1.08	1.02	1.06	1.08	1.07	1.09	1.05	1.06	1.06	1.07	
1681.	10.20	2.81	1.02	.97	.98	1.08	1.01	1.08	1.04	1.03	.99	1.00	

291

3.60

			1	2	3	4	5	1	2	3	4	5	
1296.	14.35	.53	1.43	1.44	1.42	1.48	1.42	1.47	1.43	1.42	1.42	1.41	END OF
1333.	14.33	.40	1.43	1.44	1.42	1.48	1.42	1.47	1.42	1.42	1.41	1.41	CHARGE
1360.	14.28	.33	1.42	1.43	1.41	1.47	1.42	1.46	1.42	1.41	1.41	1.41	
1411.	14.30	.26	1.42	1.43	1.42	1.48	1.42	1.46	1.42	1.42	1.42	1.41	
1427.	14.09	1.05	1.41	1.41	1.41	1.44	1.40	1.42	1.41	1.39	1.39	1.39	
1472.	14.25	.29	1.42	1.42	1.42	1.46	1.42	1.44	1.41	1.41	1.41	1.40	
1507.	14.25	.36	1.41	1.43	1.42	1.46	1.42	1.44	1.41	1.41	1.41	1.40	
1536.	14.22	.28	1.42	1.42	1.43	1.45	1.42	1.43	1.41	1.40	1.41	1.40	
1587.	14.23	.26	1.42	1.43	1.42	1.45	1.42	1.44	1.42	1.41	1.41	1.41	
1616.	14.21	.19	1.42	1.43	1.43	1.45	1.42	1.44	1.41	1.41	1.41	1.40	
1649.	14.32	.35	1.42	1.44	1.43	1.47	1.43	1.45	1.42	1.41	1.41	1.41	
1681.	14.28	.33	1.42	1.43	1.42	1.46	1.42	1.45	1.42	1.41	1.41	1.41	

COULOMBETER  
SONOTONE

END OF DISCHARGE 30

ORBIT PERIOD 90 MINUTES  
FLIGHT TEMPERATURE 21° C

CYCLE NO.	PACK VOLTAGE	CURRENT	CLM	CELL VOLTAGES				
				1	2	3	4	5
7100	5.36	3.00	-0.170	1.11	1.08	1.12	1.10	1.09
7140	5.43	"	-0.125	1.12	1.10	1.13	1.12	1.11
7180	5.39	"	-0.152	1.12	1.09	1.13	1.12	1.11
7200	5.38	"	-0.150	1.12	1.09	1.13	1.12	1.10
7240	5.35	"	-0.182	1.11	1.08	1.12	1.11	1.09
7280	5.37	"	-0.161	1.12	1.09	1.13	1.12	1.10
7320	5.24	"	-0.188	1.07	1.06	1.09	1.09	1.07
7360	5.34	"	-0.148	1.10	1.09	1.13	1.11	1.10
7400	5.46	"	-0.138	1.10	1.09	1.13	1.12	1.10
7440	5.30	"	-0.137	1.07	1.08	1.12	1.11	1.09
7480	5.36	"	-0.135	1.10	1.09	1.12	1.11	1.10
7520	5.36	"	-0.138	1.11	1.09	1.13	1.11	1.10

END OF DISCHARGE

TIME TO  
START OF  
TRICKLE  
CHARGE

7100	8.00	0.30	+0.900	1.42	1.43	1.42	1.42	1.42	28:53
7140	"	"	+0.908	1.42	1.42	1.41	1.41	1.42	28:00
7180	"	"	+0.891	1.42	1.43	1.42	1.42	1.43	28:27
7200	"	"	+0.895	1.42	1.43	1.42	1.42	1.43	28:07
7240	"	"	+0.878	1.42	1.43	1.42	1.42	1.42	28:36
7280	"	"	+0.880	1.42	1.43	1.42	1.42	1.43	28:22
7320	"	"	+0.903	1.42	1.43	1.42	1.42	1.42	28:36
7360	"	"	+0.893	1.42	1.43	1.42	1.42	1.42	28:37
7400	"	"	+0.899	1.42	1.43	1.42	1.42	1.42	28:46
7440	"	"	+0.873	1.43	1.43	1.42	1.42	1.43	28:30
7480	"	"	+0.888	1.42	1.43	1.42	1.42	1.43	28:35
7520	"	"	+0.894	1.42	1.43	1.42	1.42	1.42	28:15

END OF CHARGE

163



TEST TEMPERATURE 25° C  
ORBIT PERIOD 90 MINUTES

END OF  
DISCHARGE

END OF  
CHARGE

164

XEROX

1 copy

DDC

CFSTI

22-1